

R E P O R T R E S U M E S

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RESOURCES FOR SOUTHERN MANPOWER DEVELOPMENT.

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DESCRIPTORS- *MANPOWER DEVELOPMENT, *EDUCATIONAL RESOURCES,
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EMPLOYMENT OPPORTUNITIES, ACADEMIC ACHIEVEMENT,

INFORMATION ABOUT LABOR FORCE CHARACTERISTICS AND
MANPOWER DEVELOPMENT TRAINING RESOURCES, IN 15 SOUTHERN
STATES, WAS ANALYZED TO DETERMINE PROGRAMS WHICH WOULD
EFFECTIVELY INCREASE MANPOWER DEVELOPMENT ACTIVITIES. SOCIAL
SCIENTISTS (1) TALKED WITH MORE THAN 360 STAFF MEMBERS IN 58
SCHOOLS, (2) CONTACTED FEDERAL, STATE, LABOR, AND PRIVATE
ORGANIZATIONS IN ALL STATES, AND (3) VISITED 35 INDUSTRIES
REPRESENTING A VARIETY OF GEOGRAPHIC LOCATIONS AND TYPES.
SOME MAJOR FINDINGS WERE-- (1) FEDERAL FUNDS ALLOTTED TO
MANPOWER DEVELOPMENT ACTIVITIES WERE VERY LIMITED RELATIVE TO
NEEDS, (2) THERE IS A SERIOUS SHORTAGE OF PROFESSIONALS WITH
PERTINENT EDUCATION TO IMPLEMENT HUMAN RESOURCE DEVELOPMENT
ACTIVITIES, AND (3) SIGNIFICANT RESOURCES FOR MANPOWER
TRAINING AND SUPPORTING ACTIVITIES ARE AVAILABLE IN
UNIVERSITIES AND INDUSTRIES. SPECIFIC RECOMMENDATIONS WERE
MADE FOR (1) ESTABLISHING AN INDUSTRIAL TRAINING PROJECT, (2)
ESTABLISHING AN INFORMATION SERVICES PROJECT CONSISTING OF AN
INFORMATION CENTER, SERVICES TO DEMONSTRATE PROJECTS,
CONFERENCES AND SYMPOSIA, AND A REGISTER OF TECHNICAL
ASSISTANCE SOURCES, (3) PREPARING PROFESSIONALS BY
ESTABLISHING SPECIAL FELLOWSHIP PROGRAMS AND PROVIDING ACTUAL
WORK EXPERIENCES FOR STUDENT TRAINEES, (4) UTILIZING
UNIVERSITIES THROUGH FACULTY PARTICIPATION, GRADUATE RESEARCH
FELLOWSHIPS, AND MANPOWER SEMINARS, (5) TRAINING
PRACTITIONERS, AND (6) DEVELOPING A PUBLIC INFORMATION
PROJECT USING SEMINARS, MANNED TRAVELING EXHIBITS, A
PUBLICATIONS PROGRAM, AND SPECIAL INFORMATION PROGRAMS IN
COOPERATION WITH GROUPS SUCH AS LABOR UNIONS, CHAMBERS OF
COMMERCE, AND INDUSTRIAL ASSOCIATIONS. (EM)

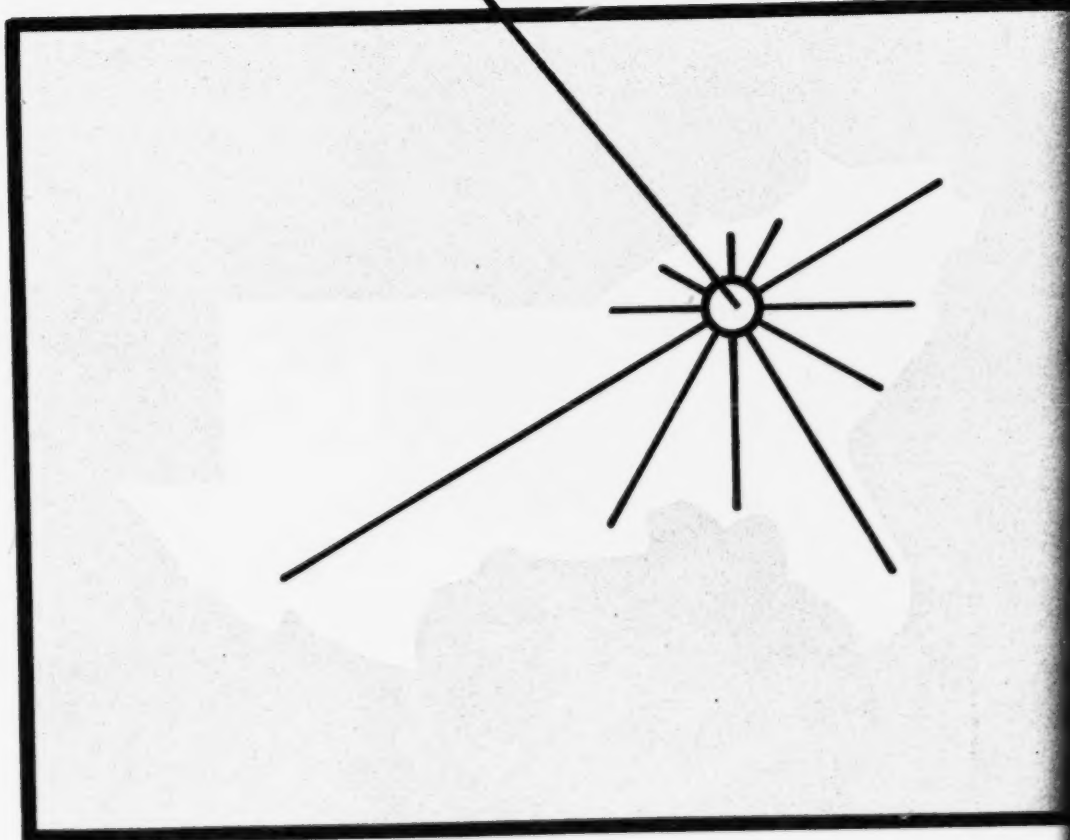
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RESOURCES FOR SOUTHERN MANPOWER DEVELOPMENT

Report to United States Department of Labor, Office of Manpower, Automation and Training

**By the Southern Manpower
Technical Assistance
Program**

**of the Oak Ridge Institute
of Nuclear Studies**



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Oak Ridge, Tennessee

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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REPORT TO THE
UNITED STATES DEPARTMENT OF LABOR
OFFICE OF MANPOWER, AUTOMATION AND TRAINING

BY THE
SOUTHERN MANPOWER TECHNICAL ASSISTANCE PROGRAM
OF
OAK RIDGE INSTITUTE OF NUCLEAR STUDIES

THIS RESEARCH REPORTED HEREIN WAS FINANCED THROUGH THE PROGRAMS OF THE
OFFICE OF MANPOWER, AUTOMATION AND TRAINING, UNITED STATES DEPARTMENT OF LABOR.

TABLE OF CONTENTS

	Page
SURVEY REPORT SUMMARY	I
FINDINGS AND RECOMMENDATIONS	III
CHAPTER I THE PROJECT – A RESOURCES STUDY	1
Project Objectives	
Scope of the Project	
Field Work	
Industrial Participation	
Technical Assistance	
People, Resources and Programs	
CHAPTER II THE PROBLEMS: PEOPLE WITHOUT WORK – UNFILLED JOBS	5
Dimensions of Training Need	
Educational Deficiencies	
Income Discrepancies	
Inferior Employment Opportunities	
Rural and Urban Manpower Development Problems	
Negroes – An Underdeveloped Manpower Resource	
Conclusion	
CHAPTER III MANPOWER TRAINING PROGRAMS	12
MDTA Training	
Office of Economic Opportunity Programs	
Vocational Education	
Employment Security Offices	
Labor Unions	
Related Development Programs	
Program Operation Problems	
Staff Inadequacies	
Lack of Job Information	

SURVEY REPORT SUMMARY

This report is about millions of Southerners who are unable to make reasonable use of their potential for work mainly because of inadequate education and training. They have no work, insufficient work or work at pay levels below the poverty line. Estimates of the number of these people in the 15 Southern states from Maryland to Texas range from 5 million to 10 million, depending on the criteria for selection. Many of these millions in need of special training live in rural areas and a very large number are Negroes.

The resources in the South for providing manpower training and development programs are not yet being fully applied to the problem. Existing programs for manpower training accommodate only a few thousand each year. These programs, many of them recently developed, are moving in the direction of relieving the manpower problem; however, they must be greatly expanded and need more funds, more qualified personnel, more support and assistance from other institutions and more efficient use of existing knowledge and experience. In addition, new programs are needed in areas not fully served by existing agencies.

A comprehensive plan for the training of the underdeveloped manpower of the region requires the inclusion of all resources — state agencies, federal programs, universities and colleges, business and industry and citizen groups. Particular attention must be given to the prevention of additional manpower problems through improvements in our basic educational system. These will require more money for schools, better guidance and counseling of young people, and curriculum changes reflecting needs for vocational education as well as academic preparation.

Attention is also needed to the upgrading of employees to the high skill positions which are going unfilled for lack of qualified personnel. This means a greater commitment on the part of government and industry to train people with capabilities to their highest potential, whether they are employed or unemployed. Special efforts in all of manpower training programs are needed to overcome the cultural and traditional barriers that have inhibited the development of the Negro population.

This report recommends activities designed to provide needed support to those institutions and programs responsible for manpower development efforts. Colleges and universities and industries in the region are considered especially important resources that are not fully utilized in supporting manpower development. Collaboration between these institutions and manpower training agencies can result in greatly improved and expanded manpower development. No one program will solve the manpower problems of the region. Each program and each institution has a particular contribution to make. It is the combination of efforts and the relationships between institutions that will produce significant advances in the development of human resources in the South.

Findings and Recommendations

FINDINGS AND RECOMMENDATIONS

"The major scope of activities under this project will be directed to the orderly planning and development of programs ..." This assignment in the contract between the Department of Labor and the Oak Ridge Institute of Nuclear Studies established the context in which the survey of Southern manpower needs and resources was accomplished. Information and ideas gathered have been viewed with an eye to the implications for action. Needs are translated into objectives for action. Resources become tools to be organized into programs.

The first concern has been "What needs to be done?" To a lesser degree, "How can it be done?" was included. The third question of "Who should do it?" is only treated in a few specific cases. The findings and recommendations may disregard the limitations of particular acts of legislation or departmental functions. Consequently, support for programs recommended may need to come from a number of sources.

The recommendations arise from certain findings or conclusions resulting from the survey which are reported in Chapters I-IV of this document. The conclusions of most fundamental significance are listed and described below. Following these are specific recommendations for programs and actions.

Findings and Conclusions

- I. *Federal funds allotted to manpower development activities are so limited relative to needs that must be directed with extraordinary prudence to achieve maximum stimulation of efforts on the part of other agencies, institutions and organizations.*

The greatest possible multiplier effect of the federal dollar must be sought. Wherever possible, programs should involve existing institutions with experience and resources of their own. Greater expenditures for careful research and experimentation, followed by demonstration programs and effective dissemination of findings, would proliferate results. Careful attention is needed to assure that the investment in training actually pays off both in manpower development and in jobs. This requires improved recruitment, selection and testing of trainees, and effective guidance, counseling and supportive services. A great deal of effort should be directed toward the reduction of the flow of additional persons into the manpower problem pool.

- II. *Dramatic expansion of human resource development activities has created a serious shortage of professionals with pertinent education and a greatly increased need for in-service training for practitioners.*

The success of the many new programs of human resource development is dependent on the ability and preparation of the professional staff involved. Practitioners, used to old ways of doing their jobs, are faced with new requirements, opportunities, relationships, techniques and terminology. They must receive new stimulation and training. Administrators are faced with the need and the opportunity for more staff with new orientations to carry out new or expanded assignments. Colleges and universities, the producers of professional personnel, are not yet geared to levels needed, nor have programs been tooled to specifications required. A large investment is urgently needed by all agencies concerned in professional preparation and practitioner training.

- III. *A tremendous quantity of valuable experience, research results, and human resource development information is available from many diverse sources which, if made accessible and fully applied to program planning and operation, would save a great deal of time, effort and expense.*

Researchers, teachers, officials, volunteers and others are performing roles in the total manpower development effort. In many cases, the knowledge and experience needed to solve a particular problem exist but are unavailable for use because they are not known or are beyond the reach of the person faced

with the problem. The development of methods for more efficient use of knowledge, experience and information is potentially one of the most productive ways of accelerating manpower development activities. Duplication of effort, the use of outdated techniques and material, the failure to learn from negative results, a lack of coordination, and the absence of productive cross-fertilization, will continue unless means of sharing information, experience and knowledge are established. Dissemination of the findings of research and of demonstration programs is of particular importance.

IV. Significant resources in Southern universities and industries for manpower training and supporting activities are available and must be utilized to make manpower development efforts more responsive to the level of need.

Universities have capacities for producing needed graduates trained in vocational teaching, guidance, manpower economics and other fields needed for manpower development. They have faculty and facilities necessary to provide in-service training for practitioners. Their research capabilities have been amply demonstrated in many fields. The talents found on campuses can be used in program planning, supportive services and evaluation. Many institutions of higher learning conduct training programs for sub-professionals and special demonstration projects. Programs to stimulate and direct greater application of these resources merit a high priority.

Access to the unmatched equipment, facilities, job training experience and knowledge of job requirements of industry can increase many times the level and effectiveness of manpower training. The participation of industry in providing training to meet the needs for highly skilled workers and to offer training in an actual work environment should be aggressively sought. Byproducts of greater participation will include more meaningful inventories and forecasts of job vacancies, greater attention to development of curriculum for training, research on methods and more effective placement of graduates.

V. The dispersion of responsibility for manpower development and related activities among a multiplicity of agencies and institutions requires unusual efforts in interagency and intergovernmental cooperation, communication and coordination.

Basic to progress in this area is the free and efficient flow of information between all concerned. If the activities and plans of one agency are known by related agencies a certain amount of self-coordination will follow. Wherever it is possible, decentralization of authority and freedom from excessive restrictions at the state or local level should contribute to the possibilities of cooperation and coordination. Cooperation among parallel groups should be encouraged at all levels. The theories behind the community action program concept, the establishment of development districts, the Department of Agriculture's Rural Community Development Service and the Appalachian Development Program appear to be sound, but performance of each concept suffers because of legislative and agency limitations which narrow the mission to a special group or function. Human beings, and their problems, do not always fit into neat jurisdictional packages that can be fully served by a single agency.

VI. Existing gaps in knowledge needed for effective manpower development require additional research, experimentation and careful evaluation of activities.

More research is required on training needs of private industry, particularly in the areas served by Bureau of Apprentice and Training personnel. After such an analysis is made, on-the-job training could be expanded in a more comprehensive fashion. In view of the federal interest in expanding on-the-job training, additional personnel with orientation other than apprenticeship training should be supplied each state office.

Systematic evaluation of each manpower training project should be carried out on a continuing basis with the results being fed back to persons with operating responsibility. It may be of greater value to have an independent group perform the evaluation function.

Areas to be investigated should include recruitment methods, planning and development, determination of priorities for training and types of training to be provided, placement practices and accomplishments, and services to rural areas. Such evaluation studies might begin with employment security agencies and be directed to other agencies and programs. Studies and reports from experimental and

demonstration projects are especially important and should be widely distributed.

Better state and local occupational forecasts are needed. These should include identification of new jobs as they develop. Such information is vital to the training process and has become much more crucial because of the increased training effort. A variety of groups are active in this area — employment security personnel, university personnel, private organizations, the U. S. Office of Education, the Social Security Administration and others. Even with this effort the data are still fragmentary. It would appear most desirable to provide support sufficient to carry out this function on a regular basis in each state by employment security personnel.

VII. The greatest single element of underdeveloped Southern manpower potential is the Negro and sufficient means have not yet been devised for the productive release of this potential.

Manpower development and training programs in the South must be designed and executed with increased recognition of the magnitude and extent of training and related services needed for Negroes. A very high percentage of the millions in the South requiring training are Negroes. Unless some massive programs are developed and operated, the region cannot expect to attain a satisfactory level of achievement for its labor force. It appears that the numbers requiring training increase at a greater rate than these people are now being trained. Programs directed at training and placing more Negroes in public contact and policy positions in agencies in the South should improve the minority problem and contribute to the development of new occupational images for young Negroes. It is also apparent that specialized vocational guidance is needed for Negroes in order to direct them into the widening variety of job possibilities that are becoming available. It is reported that, in the South, the mobility of the technically-trained Negro has been restricted by discriminatory housing practices and other remnants of discrimination and segregation. All manpower development programs need to have a built-in awareness of the magnitude of Negro development problems.

VIII. Many officials, community leaders and most citizens are not well informed about regional manpower problems, or public programs available for attacking these problems. Essential support is being lost.

Efforts need to be directed toward creation of more favorable public attitudes toward manpower development and training. Specific groups often have great interest in problems within the Southern society. These include chambers of commerce, responsible training and management officials of private industry, labor leaders, and personnel engaged in manpower training and development activities. Many officials appear to have a narrow view of their responsibilities in regard to manpower training and may not fully understand the national policy or philosophy as it relates to manpower training, poverty programs and vocational education. An intensive public information program is indicated.

The special interest and role of organized labor in manpower development and training activities needs to be recognized through information efforts. A more complete understanding of federal manpower training activities will assist in obtaining local union support and should result in improved operations. The Southern Labor School, an association of state labor council officials, is eager to cooperate in demonstration projects to inform and solicit the support of local unions for manpower training programs through special technical assistance staffs working out of state labor council offices.

IX. Programs of regional scope, designed to assist in expanding, expediting, developing, and servicing manpower activities in the South, would be strongly supported by concerned individuals, agencies and institutions and would ameliorate some problems of political or jurisdictional boundaries.

The response to suggestions that regional programs of support and assistance might be possible was most enthusiastic from all institutions. Of particular interest were potential regional programs providing information services, training assistance, increased supply of professional personnel, technical assistance and cooperative research. Regional programs serve to stimulate, facilitate and support local and state activities. If regional activities can be developed across agency and legislative lines, as well as state boundaries, they can fill an existing void by bridging the gaps between agencies, levels of government, individual programs, potential sponsors, universities, industries and other components of

the manpower resource system. It is interesting to note the extent to which the staff of this project, working in its capacity of providing technical assistance, was able to provide productive liaison between various groups. A great deal of information exchange was accomplished or arranged, new relationships were initiated, and other services, as well as direct assistance in program development and implementation, were performed.

Many of the recommended action programs are suggested as being most effective as regional activities. The proposed programs are so interrelated that operation in combination is recommended to produce an over-all regional effort. Growth of these activities sufficient to meet the needs of the region might well result in a program complex that would serve as a Southern manpower center. Since one of the objectives of the project was to explore the feasibility of a manpower center, our conclusion is that within the foregoing context, the establishment of a manpower center is both feasible and desirable.

Project Recommendations

1. Industrial Training Project

Many large private industries have well developed manpower training programs to meet their own needs for trained personnel. This capacity for training is often not utilized fully and might be made available under certain circumstances for training personnel beyond the needs of the particular industry. Such an arrangement strengthens manpower training programs by bringing the experience, facilities and equipment of industry to bear on the training process, and makes possible additional activities related to manpower development such as research on training content and methods and the preparation of vocational and technical teachers. Large numbers could thus be trained in work particularly pertinent to industry's needs.

The feasibility of establishing such a training project involving Union Carbide Corporation facilities and personnel in Oak Ridge was discussed with officials of Union Carbide and the U. S. Atomic Energy Commission, the contracting agency for Union Carbide's Oak Ridge Operations. Both the AEC and Union Carbide are very interested in the detailed exploration of this possibility and are willing to participate in the development of specific plans. As a demonstration project, this activity will establish approaches, patterns of cooperation, and techniques which have applications to other situations where industrial training resources might be made available.

The following steps have already been taken:

1. The identification of specific training capabilities is well under way with course outlines being developed and estimates being made of the number of trainees which could be accommodated. Occupations for which training would be available include machinists, machine design draftsmen, parts programmers, engineering aides, electricians, laboratory technicians, illustrators, key punch operators, reproduction operators and other skilled and technical jobs.
2. Discussions were held with the University of Tennessee to explore the expressed interest of its various departments in research and in technical teacher training related to the proposed project in Oak Ridge.
3. A survey of employment opportunities in various industries (recently completed by Union Carbide) and information from AEC manpower pooling system on job vacancies, have been reviewed to help determine areas in which training would be most productive.
4. Our preliminary study identified a number of potential training groups as follows:
 - a. Workers who have been terminated because of automation and technology; for example, chemical operators will be retrained as parts programmers, machine design draftsmen and engineering aides.

- b. Trainees capable of accelerated training in advanced technological skills. It is hoped to develop methods to bring trainees to such skill levels within a shorter period of time than is normally allowed for such training. This program will make possible increased placement of workers at the higher skill levels where job vacancies continually exist, thereby opening up more jobs at the lower skill levels where the number of workers exceeds the number of jobs.
- c. College dropouts are identified as one target group that can be trained for a variety of technical occupations; for example, draftsmen and laboratory technicians.
- d. A group of hard-core unemployed adults and young high school dropouts will be recruited for training. The needs of this particular group for basic education and vocational training will require the involvement of other institutions such as local school systems and area vocational schools. Through the combination of education, vocational training and on-the-job industrial training, it is hoped that each member of this group would reach a high skill level in the shortest possible time.
- e. Practicing, and potential vocational and technical teachers will be recruited and placed in an accelerated program to give them the necessary training and experience with modern equipment to prepare them for meaningful teaching positions in vocational and technical institutions. Part of this program would include academic work at the University of Tennessee. These teachers might be used as part-time staff in some training courses, reducing instructional costs and giving the teachers valuable experience.
- f. Students in vocational and technical schools in the region would be provided opportunities for industrial experience as part of their training courses. This program would compare to the engineering cooperative programs of many industries and colleges of engineering.

Union Carbide is planning to continue to do some training for its own purposes and at its own expense; however, the corporation is willing to incorporate its training plans into an over-all training project as proposed. This appears to be a highly desirable situation. The equipment which would be utilized in training represents the most modern technology and, therefore, the most meaningful training aids possible for the kind of courses to be offered. The value of this government equipment is calculated in the millions of dollars. This type of equipment is not normally available to an independent training facility.

Anticipated accomplishments are: (1) to demonstrate the advantages and effectiveness of private industry training resources; (2) to improve and accelerate the preparation of vocational teachers; (3) to improve the effectiveness and relevance of vocational training curriculum; (4) to contribute to the improvement of training methods; and, (5) to develop a model that could be applied in similar situations throughout the country. The management, research, and training capabilities available through the participating organizations, combined with available space and the most modern and sophisticated industrial facilities, provide an excellent setting for a very important experiment in manpower development. The value of the personnel, plant, and equipment contributed to the project greatly reduces the costs that would otherwise be incurred for this type of training.

II. Information Services Project

The exchange of information and experiences which is of importance in achieving maximum effectiveness of manpower efforts is particularly difficult for several reasons:

- 1. A great volume of uncoordinated information on research results, demonstration projects and program experiences is involved.
- 2. Manpower development involves a number of disciplines, with the scattering of information into a number of specialized areas unfamiliar to a particular researcher, teacher or official.

3. Manpower development has no standard definition and means different things to different people. Thus, much pertinent information is not conveniently labeled as related to manpower development.

A project to help remedy this problem must cut across traditional, professional and jurisdictional boundaries. An information project is recommended which would include the following specific activities:

1. Establishment of an Information Center – The center would apply modern techniques to the identification, collection, organization and dissemination of information pertaining to manpower development. Rather than create new information, it would serve as a mechanism for providing access to existing information. It would include a data bank of current statistical material from available sources. The program of dissemination might involve the use of depository libraries at universities and colleges throughout the region. One service might be the provision of kits of basic information and lists of sources to researchers, heads of programs, or other professionals in need of building a set of on-site material. At present, each person is left to his own devices with few guidelines and no formalized information assistance.

2. Information Services to Demonstration Projects – In view of the particular importance of demonstration projects in guiding further actions, it is recommended that special central information assistance be provided. This includes help in establishing information collection and reporting systems, participation in the performance and recording of evaluation studies, and the distribution of results to others. Central information would be maintained, relating various demonstration project results with other material. Such an activity might be totally supported by the inclusion in all demonstration projects of a budget item requiring the use of, and payment of a charge to, the information service.

3. Conferences and Symposia – A series of conferences and symposia is recommended as an effective way of exchanging experiences and of disseminating information. These meetings could be held on university campuses throughout the South and might include such topics as "Human Resources and Industrial Development," "Relationships between Rural and Urban Manpower Problems," "The Special Training Needs of Negroes," and "The Interrelationships of Development of Natural and Human Resources." Participants would include representatives from government, industry, and universities with emphasis on interagency and interinstitutional involvement.

4. Register of Technical Assistance Sources – A central collection of information on capabilities of institutions and individual specialists available for technical assistance and consulting is recommended. Teams for program development, research and project evaluation could be assembled from this register.

III. Preparation of Professionals

Repeatedly stressed to the project staff was the scarcity of individuals with background and training for work in the field of manpower resources. Staff needs exist in employment security offices, in vocational schools, on college campuses and in other agencies and institutions participating in manpower development. New programs in manpower development require a greater number of well-prepared personnel than now is provided through existing educational and training patterns. A very similar problem existed in 1946 in the new field of nuclear energy. ORINS has carried out special activities which have aided greatly in the rapid development of professionals in this new field over the last 20 years. A project directed toward the application of this experience to the problem of accelerating the production of trained personnel in human resource development is needed. Two activities are recommended for priority consideration:

1. Establishment of Special Fellowship Programs – Such programs, particularly at the graduate level leading to the master's degree, encourage students to choose careers in manpower development and stimulate universities in developing graduate curriculum pertinent to the needs of manpower development. Established courses from various disciplines can be combined in new arrangements to give selected students a broad and pertinent preparation for professional work in this field. Fellowships can also be offered to meet needs for occupational guidance counselors and other specialists.

2. Student Trainees – Both at the undergraduate and graduate level, programs to provide actual summer work experiences in manpower programs would be of value in stimulating and directing students into careers in this or related fields. Such a program also has the beneficial effect of bringing the universities and colleges into closer relationship with actual program operations.

IV. University Participation

The resources of universities have been identified as important to manpower development efforts. Closer relationships between academic institutions and manpower agencies are needed if university research is to be pertinent and if teaching is to be relevant. In addition, such relationships provide for immediate accessibility of university resources to practitioners in the field. The following specific activities are recommended:

1. Faculty Participation – Opportunities should be provided for university faculty to spend periods of from three to twelve months working with manpower programs. This activity could provide support for faculty members who wish to increase their knowledge and involvement, and can be of value in bringing the stimulation and technical competence of university staff to bear on problems in the field. The results will be improved research of importance to both the agency involved and the university represented and more effective teaching by the faculty member.

2. Graduate Research Fellowships – In selecting thesis topics for graduate research, universities should be encouraged to consider the needs of manpower development agencies and programs. Supporting graduate students to do research in the field, and providing access to information and personnel, will be of value to the agency, to the student and to the university.

3. Manpower Seminars – Professionals practicing in the manpower field should be encouraged to make themselves available to universities for special lectures and seminars for graduate and undergraduate students. A program to identify potential lecturers, to publicize their availability to colleges and universities, and to assist in the financial support and arrangements, would open up at little cost a new avenue of communication between academic institutions and practicing agencies.

V. Training for Practitioners

Staff members, local government officials and volunteers concerned with manpower development activities are not provided with sufficient opportunities for short term training. This project would provide for the design, development, operation, testing and regional distribution of basic and advanced training in short courses, workshops and institutes for all types of personnel in the human resource development field.

Type of Course

- Short courses would consist of two- and four-week sessions devoted primarily to class work type instruction.
- Workshops would extend over three to five days, could provide a variety of training experiences and might be used primarily for larger groups.
- Institutes would extend over a summer, or be conducted on a year-round, one-day-a-week basis and provide classroom instruction, laboratory experience and field work.

Levels of Instruction

- Basic instruction would be concerned with identifying and describing fundamentals and major activities in the human resource development field. It would also provide orientation and the information required for an understanding of pertinent legislation and administrative regulations.

- Advanced instruction would differ in that it would go into greater depth and deal with special problems, such as program development, job information, counseling, testing, coordination and communication problems and total resource development.
- All training would provide: (1) familiarization with sources of information and assistance; (2) consultation with experts; and (3) exchange of experiences among participants.
- After each type of training experience had been operated, tested and refined, technical assistance would be provided in establishing these courses in a variety of locations throughout the region.

Training Course Participants

- Occupational types would include: administrators, researchers, guidance and counseling personnel, recruiters and testers, welfare workers, vocational and technical teachers, program developers and analysts, local government officials and sub-professionals in many of these fields.
- Agencies served would include employment security, vocational education, welfare, economic opportunity, social security, industrial development and agriculture.
- Volunteers may include citizens serving as workers in human resources development programs, and members of advisory boards for manpower training and community action programs and vocational schools. Also, members of boards of directors of community action programs, including the poor, might attend.

VI. Public Information Project

This project would provide for the development and operation of a variety of activities in an educational information program designed to keep the general public and selected groups currently informed on the value, importance and status of manpower development and training in the South and the nation.

Program Activities

1. Seminars on human resource development would be organized and conducted for representatives from the communication media in order to provide them with background information useful in understanding and reporting manpower training activities.
2. Manned traveling exhibits portraying occupational opportunities could be developed and operated for showings at secondary and vocational schools in order to inform students and stimulate guidance and counseling activities.
3. A publications program could be developed to prepare special material on human resource development for distribution to the general public, use in secondary schools and in teacher training.
4. Specialized manpower development information programs would be designed in cooperation with selected groups such as labor unions, chambers of commerce and industrial associations to be used for relating the manpower story to their members.

The methods and techniques of operating information programs are well known and have been effectively used in many other fields. Such a program would increase understanding and support of the new wide-reaching human resource development efforts.

Chapter I THE PROJECT – A RESOURCES STUDY

Chapter II THE PROBLEMS: PEOPLE WITHOUT WORK – UNFILLED JOBS

Chapter III MANPOWER TRAINING PROGRAMS

Chapter IV RESOURCES AND POTENTIALS OF UNIVERSITIES
AND PRIVATE INDUSTRY

Chapter I

THE PROJECT – A RESOURCES STUDY

The Oak Ridge Institute of Nuclear Studies (ORINS)* began this project on April 1, 1965, under a contract with the Special Programs Division of the Office of Manpower, Automation, and Training of the United States Department of Labor. The project was to perform a study of Southern manpower needs and resources resulting in a report of findings and recommendations for regional programs. Technical assistance to agencies and institutions in the region was to be offered as opportunities presented themselves. Particular attention was to be given to the role of universities and colleges, most of them members of ORINS corporation, in manpower development efforts. The project represents an important exploratory step in the more active involvement of ORINS in activities related to the development of human resources in the South. Report findings and recommendations underline the potential of Southern universities and colleges for participation in the effective development of manpower resources.

For this study, the 15 states from Maryland south and west to Texas have been considered as the South. According to reports and papers studied, this region lags behind the rest of the nation in education, income and manpower development. The South has cultural characteristics and feelings that identify it as a region with many special problems and needs. The South also has many resources which, if properly directed and better utilized, can greatly accelerate the growth toward national levels of education and prosperity with a labor force that can be comparable in educational achievement and work skills. As a fully developed region, the South can add significantly to the nation's well being.

Project Objectives

To explore the feasibility of regional programs for increasing utilization of manpower development and training resources, the project has pursued specifically the following objectives:

1. Determining the number of people in the Southern labor force, active and reserve, in need of further training because of income level, educational achievement and job needs.
2. Obtaining from agencies in each state concerned with manpower development and training, information about program operations, problems and staff.
3. Surveying and cataloging resources available in Southern universities and industrial concerns for providing assistance with manpower development activities.
4. Developing recommended programs that will contribute to increased and more effective manpower development activities, with particular emphasis on the use of universities and industrial resources.

Scope of the Project

The survey and recommendations of this project do not extend to basic economic and political questions. Some of the more serious impediments to full development of human resources in the South have to do with political failures such as inadequate tax structures, and economic deficiencies, such as relatively low levels of capital investment and industrial development. Sociological and cultural problems, particularly in regard to minority groups, further complicate the picture.

It is assumed that healthy economic growth will provide job opportunities for trained personnel,

* Effective January 1, 1966, ORINS will operate under a new charter of incorporation as OAK RIDGE ASSOCIATED UNIVERSITIES.

and that technological advancement will contribute to, rather than eliminate, the possibility of full employment for properly trained workers within the time period to be served by this report.

Population shifts and trends are recognized; however, the report deals with population where it lives and does not accept migration as a necessary solution to manpower development problems.

The importance of legislation related to the circumstances of work is recognized, but is not dealt with specifically in this report. For example, minimum wage legislation does not apply to many jobs. Consequently, full-time employment often produces income below the poverty level of \$3,000 per year. A manpower training program to prepare unemployed to fill service and other occupations that may pay below \$2,000 per year would verge on futility unless it assumes that other remedies will be forthcoming.

The report deals specifically with the problems of bringing unemployed and underemployed people to a level of training and development that will assist them in finding satisfactory places in the work force.

The report deals largely with the institutional resources in the South important to the building of long range programs of manpower development. An attempt is made to identify ways to expand, accelerate, strengthen, support and coordinate efforts of existing institutions and agencies, rather than to develop wholly new manpower training institutions.

Field Work

This report is the result of work by a small group of social scientists representing public administration, economics, political science and sociology, which spent the summer talking with professionals in the field, meeting together at home base, discussing, and writing about manpower development on a regional basis. This study is a collection of information that helps to identify major problems related to the development of Southern human resources through manpower training. Many of the ideas are not original but represent the thoughts and interests of a variety of people and organizations put together in new combinations to produce action programs of value to those institutions and agencies concerned with the problem.

By the end of the first month, the director and five professional staff members (two part-time) were at work. In early June, two full-time professional staff members were added and one part-time employee was changed to full-time. Two of the staff members were professors of economics from member institutions of ORINS. They were employed as summer research participants under established arrangements for ORINS temporary use of university faculty. This involvement of faculty members not only provides important skills needed for assigned projects but also benefits the professors and their institutions by broadening their experiences. The resulting effects on university research and teaching extend the value of the arrangements well beyond the scope of the projects to which the faculty members are assigned. Another staff member was a graduate student in economics from a member university. His participation enhanced the project and also contributed to his professional development.

During the second month, staff orientation was completed and field work began. Visits to universities were completed. More than 360 faculty members and university officials were visited in 58 schools. (Appendix I lists the schools visited.) During July, and until mid-August, the survey of state agencies was conducted with over 150 agencies being visited in the 15 states of the region. (Appendix II lists the federal agencies operating in the states, labor union groups, private groups and official state organizations visited.)

Visit schedules were influenced by the recent passage of a number of federal acts supporting increased manpower training and, therefore, included a variety of contacts. In addition to the training activities under the Manpower Development and Training Act of 1962 as amended, several other major pieces of legislation provide for training or training related activities. These include the Vocational Education Act of 1963, the Economic Opportunity Act of 1964, the Appalachian Regional Development Act of 1965, the Elementary and Secondary Education Act of 1965, and the Public Works and Economic

Development Act of 1965. The sum total of this legislation is an extensive, changing, complex body of information of which state and local manpower officials, university personnel, and others must have intimate working knowledge as they engage in activities related to manpower development.

Defining the problem involved a review of pertinent census data on a county-by-county basis for the South. This information was useful in isolating the principal target population in need of training and in illustrating the magnitude and severity of the manpower problems faced by the South.

General recommendations were developed and refined from a list of over 100 ideas compiled by staff members. The staff collected an abundance of ideas and information and choosing what to eliminate has been a difficult but necessary task.

Industrial Participation

Early in the project it was decided that a sampling of industrial training experience and capacity would be a desirable part of the study. In this connection Union Carbide, the operator of AEC's large industrial facilities in Oak Ridge, was approached with a request for assistance. The management of Union Carbide expressed interest in the utilization of industrial training know-how and facilities in manpower programs and, with the concurrence of AEC, assigned one of the superintendents of the Y-12 plant to the project on a full-time - no cost basis. His assignment was to assist in the survey of industrial training potential and to begin exploration of the possible use of the Y-12 plant for training purposes.

Thirty-five industries, representing a variety of geographic locations and types, were visited. Considerable work has been accomplished on the identification of training capabilities of Y-12, and meetings with representatives of Union Carbide and AEC indicate a continued strong interest in this facet of the project.

Technical Assistance

Technical assistance was provided as the schedule permitted and one field specialist devoted almost full time to project development work with the Catholic Church in Mississippi. He assisted with the planning of a very significant state-wide training project entitled "Operation Star" for the hard core unemployed. Operating in 18 centers throughout the state, it is expected that under the project, approximately 10,000 trainees will complete the over-all education program, and 25,000 persons are expected to be placed in jobs as a direct result of this program over a two year period. This project may well set a pattern for other Southern states.

Other technical assistance provided by the staff served a variety of organizations. Most of the personal visits with university faculty and agency officials resulted in an exchange of manpower information and very often led to transmittal of publications and other follow-up activities of benefit to the organization visited. Staff members assisted with the COMET Experimental and Demonstration Training Project operating in the state of Tennessee. Assistance was given to the project office at Austin Peay State College, as well as to the local project director in East Tennessee. Staff members participated in a variety of programs related to human resource development, including a school for poverty program coordinators at the University of Tennessee and a workshop conducted in Anderson County, Tennessee, for federal and state agencies involved in the poverty program. A human resource development field tour was conducted for graduate students in economic development from Vanderbilt University. Assistance in program development was provided to the University of Kentucky, and a program presentation on federal manpower legislation was conducted for the University of Tennessee Industrial Management Conference. Staff members also assumed supervisory responsibilities on a volunteer basis for a summer internship program in area development - a cooperative program of the Tennessee Valley Authority, the University of Tennessee, the Clinch and Powell River Valley Association, and the National Center for Education in Politics. The staff also assisted the Council of the Southern Mountains and the Clinch and Powell River Valley Association in a program on the effects of Medicare on the need for increased staff and facilities

for care of the aged in rural areas. These activities illustrate the value of a professional staff in providing information and program design assistance for activities related to manpower development.

People, Programs and Resources

The chapters that follow are concerned with Southerners without work, the manpower programs that are designed to prepare them for jobs, and the resources available from universities and private industries that have application for this process.

We are dealing with economic dropouts from the American system. Most of the nation's labor force receives sufficient preparation from established academic and vocational schools for jobs with organizations that train them thereafter as needed throughout their working life. But many people are bypassed, drop out, or are inadequately prepared. These individuals have to rely on special means — primarily public programs — for their job training. These public programs have as their objective and basic economic justification and provision of sufficient training for underdeveloped workers to enable them to enter, or re-enter, the work force. They are also concerned that the workers can continue the development necessary to retain a job and to advance as their abilities allow.

A presidential committee calculates that by 1970 the gross national product will be \$870 billion, with federal revenues of \$165 billion — nearly \$50 billion more than this year. An increased investment in manpower programs is probable. With these financial resources, advance planning is needed to evaluate and develop effective methods of making major improvements in the immediate years ahead.

Chapter II

THE PROBLEMS: PEOPLE WITHOUT WORK – UNFILLED JOBS

Two manpower problems exist in a frustrating tandem relationship. A large group of people without marketable skills or educational achievement forms a hard core of unemployed who are unable to participate in the economic system as workers. At the same time, important and often critical needs exist for more workers with high skills or technical abilities. If the unemployed could be trained to fill the vacancies which plague employers both problems would be solved. Obviously, the situation is far more complex. The desire to train any significant number of hard core unemployed to take highly-skilled or technical positions is unrealistic. If this "leapfrogging" is not possible on a large scale, what can be done both to fill important vacancies and to give employment to those who are now denied? A solution necessarily involves the upgrading of workers now having basic skills to higher levels of skill, as well as training the hard core to fill the less skilled positions.

One of the reasons that highly-skilled jobs go unfilled is that most workers with the basic preparation and capability for successful advanced training are gainfully employed at levels below this potential. Too often these workers advance in levels of skill only through the slow process of on-the-job growth rather than through deliberate training designed for more expeditious development of their potential.

One of the reasons that a hard core exists is that the lower skilled jobs are glutted with workers with considerably more potential than is required by the jobs they hold. Most large employers require a high school diploma as a minimum for any job – even those requiring no academic skills such as janitor, general laborer, or watchman. Many of the unemployed have limitations in their preparation or capabilities that might prevent them from achieving jobs above the unskilled level. Even as they reach minimum levels of education and job adjustment they may find a "no vacancy" sign because jobs are already filled by individuals having more education and capability than the jobs require.

It is important that attention be given to means of expediting the upgrading of workers with potential. This helps both the individual and the economy. Equally important is the provision of basic education and training for the unemployed to prepare them to enter the work force and to participate in advanced training as they are able.

This project was primarily concerned with manpower training in relation to the hard core and others on the lower end of the educational and economic spectrum. Therefore, the emphasis in this report is on the dimensions of the problem of development of this lower group, and on some of the causes and complexities of this reservoir of untapped human resources.

Dimensions of Training Need

The South, as a region, is faced with a vast problem of underdeveloped human resources. Statistics on education, income and employment in the region identify the target population of this project and reveal the extent of the problems. Comparisons with national data underscore the relative dimensions of the effort the South must exert over a long period of years just to reach national levels.

Estimates of how many persons in the 20 million Southern labor force need training depend on basic assumptions and interpretations of statistical data. The figures are developed as guides to the extent of the problem of preparing those least prepared for fuller participation in the work force, rather than as data on training needed to fill specific job vacancies.

If one assumes that all persons who are heads of families, or are unrelated individuals presently in the poverty group and able to work, are in need of training, then the number in the South is 4.4 million. This figure does not include disabled persons or those too old to benefit from training

Since educational attainment, as well as levels of income, bear on the need for training, another

Table 1

LOCATION OF THOSE IN NEED OF TRAINING
BASED ON INCOME AND EDUCATIONAL LEVELS

	Heads of Families age 14-44 plus other male and female heads with children under 18 years, all with less than 8 years education	Unrelated Individuals age 14-44 with less than \$2,000 income	Total	Urban	Distribution	
					Rural Farm	Rural Non-farm
Alabama	104,986	44,128	149,114	80,275	15,265	53,574
Arkansas	47,435	23,887	71,322	32,620	11,753	26,949
Florida	101,802	104,043	205,845	139,290	4,904	61,651
Georgia	147,458	70,186	217,644	107,887	17,624	92,133
Kentucky	90,113	50,322	140,435	53,089	21,047	66,299
Louisiana	118,670	51,196	169,866	106,470	11,300	52,096
Maryland	67,180	57,130	124,310	76,494	4,092	43,724
Mississippi	71,731	40,228	111,959	45,996	22,780	43,183
North Carolina	181,512	102,130	283,642	109,611	38,223	135,808
Oklahoma	33,874	42,422	76,296	47,650	4,228	24,418
South Carolina	104,559	56,346	160,905	61,473	17,885	81,547
Tennessee	110,588	56,994	167,582	83,312	22,607	61,663
Texas	255,475	180,946	436,421	328,811	23,854	83,756
Virginia	134,747	106,484	241,231	130,684	18,198	92,349
West Virginia	42,372	22,288	64,660	22,597	2,816	39,247
Totals	1,612,502	1,008,730	2,621,232	1,426,259	236,576	958,397
				54.4%	9.0%	36.6%

Table 2

AVERAGE EDUCATIONAL ATTAINMENT
AND PROJECTED INCREASES IN EMPLOYMENT
BY OCCUPATIONAL CATEGORY

Occupation	Per Cent Change 1960-70	Mean Educational Attainment 1960
Professional and Technical	+ 40	16.2
Clerical and Sales	+ 25	12.4
Proprietors and Managers	+ 28	12.5
Skilled Workers	+ 25	11.0
Semiskilled	+ 19	9.9
Service Workers	+ 26	9.7
Unskilled	No Change	8.6
Farmers and Farm Workers	- 18	8.6
Labor Force of South*	+ 21	9.6

SOURCE: *Manpower Challenge of the 60's* - USDL

* Computed from U. S. Census data, 1960

approach can be stated. Individuals responsible for supporting families or themselves, with at least 20 years of work life remaining, and who have less than eight years of education or less than \$2,000 income, total 2.6 million. (See Table 1.) Add to this group persons between the ages of 45 and 65 (less than 20 years of work life remaining) and the number is increased to 5.5 million.

In considering occupations which offer increased employment opportunities, a much larger figure is selected. Workers in those occupations in which increased employment is indicated in the decade 1960-1970, show average educational attainments of 9.7 to 16.2 years. The median educational attainment of the labor force in the South in 1960 was 9.6 years. Thus, more than one-half of the total labor force or nearly 10 million persons has less education than is normally required for the expanding occupations of the near future. (See Table 2.) Their hope of being employed in, or advanced into, the new job opportunities is very small unless they receive additional training. The probability of their becoming unemployed is significant. There is reason to believe that the number of individuals in need of training is growing.

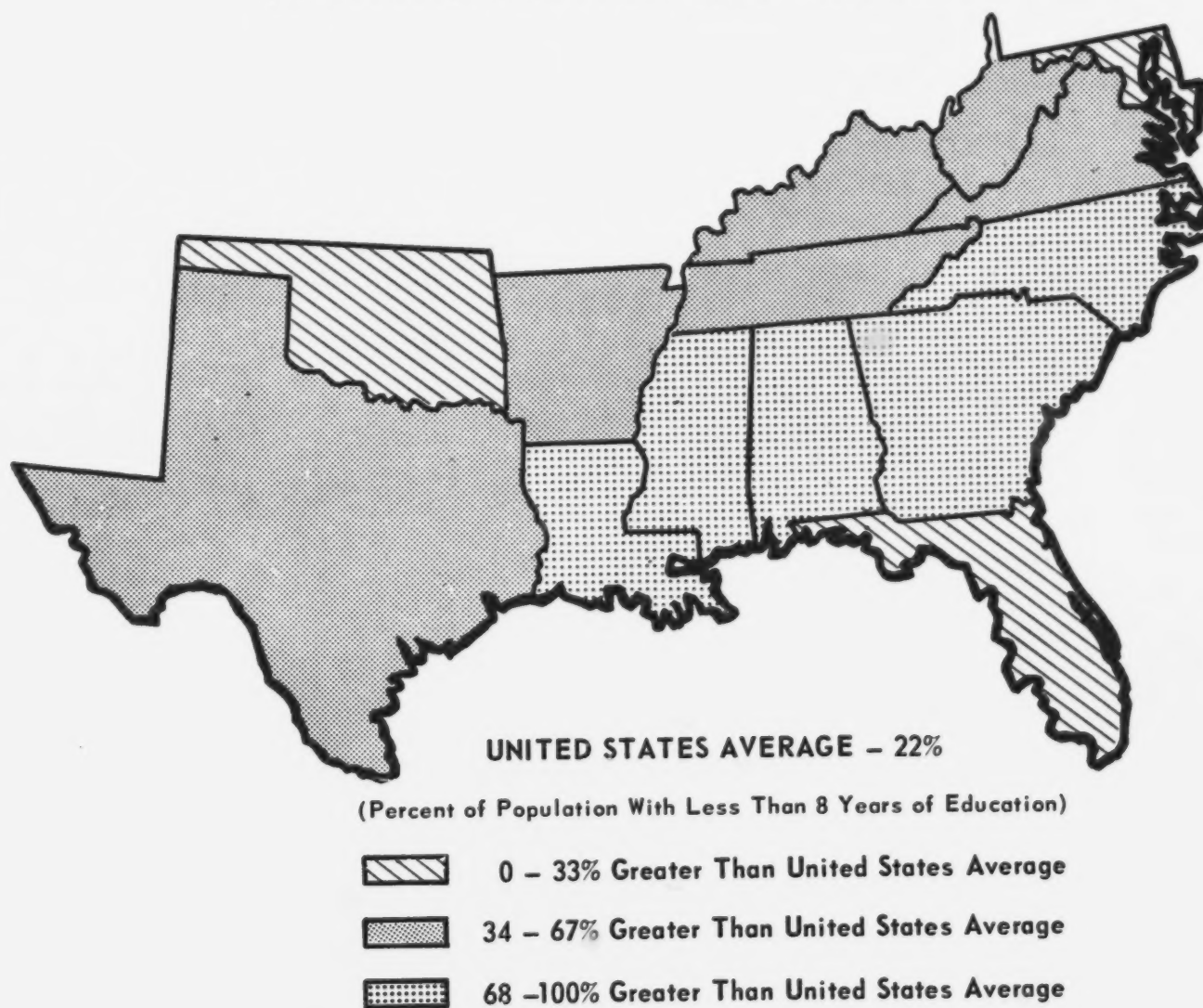
Regardless of which total is used to express the number of persons in need of special training, a comparison with the number actually trained under existing manpower programs immediately shows the relatively small scope of these efforts. In 1964, only 41,106 persons in the South were approved for institutional MDTA training and only 7,219 for on-the-job training. Additional small numbers were added by Area Redevelopment Administration training and economic opportunity programs. Even if the number added were doubled or tripled, it would be quite small in relation to the number in need of this kind of attention. It is concluded that only limited regional improvement will result from the current level of programs.

Educational Deficiencies

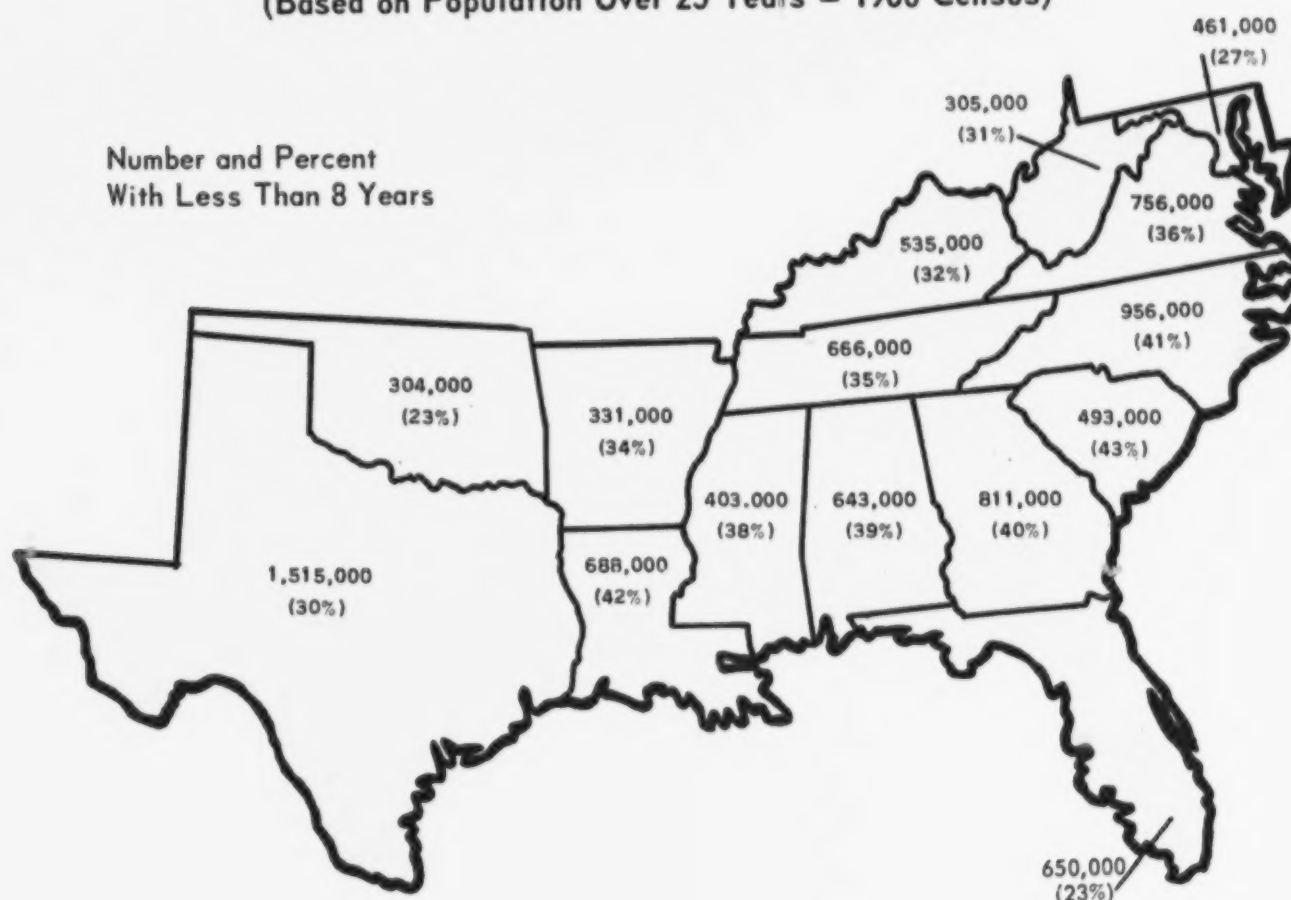
Underlying the manpower problem are the inadequacies of education in the South. A high school diploma is almost an absolute necessity for entrance into today's job market. The South has several million people without this necessary qualification and large numbers are being added each year. A long history of underfinanced school systems, plagued with the added economic inefficiencies of segregation, results in an unsatisfactory number of graduates. Many of those who do graduate are poorly prepared for jobs. This is particularly true of schools in rural areas and is almost universally true of Negro schools in rural areas. With less economic development, the resources available for education are meager – the problem of underdeveloped human resources is perpetuated.

Statistics from the National Education Association's *Rankings of the States, 1965*, show that, for the region, only West Virginia had a pupil-teacher ratio more favorable than the national average and only Maryland had an average teacher salary above the national average. Yet in all but two states of the region (Florida and North Carolina), expenditures on education as a per cent of total government expenditures were above the national average. Although a greater proportion of government expenditures in the South goes to education, the base is so small that in absolute and per capita terms total expenditures are insufficient to meet the need for an adequate educational system.

Relationship of Educational Achievement
Of Adults in Southern States to National Average
(Based on Population Over 25 Years – 1960 Census)



Educational Achievement of Adults (Based on Population Over 25 Years – 1960 Census)



Of the 80% of high school graduates who do not go through college, many cannot compete in today's job market. According to the American Council on Education's report, "Man, Education and Work," during the present decade the number of young workers seeking to enter the labor force will increase by six million. For every three young entrants into the world of work during 1963, there will be five in the years beyond 1965. To the extent that we continue to drop out, or turn out, inadequately trained people from our secondary schools, we will be adding to the millions in our Southern population who need additional training assistance.

The South has 28% of the national population over 25 years of age – 28 million people. In the South, 65% of this group has less than 12 years of education, compared with 59% for the nation. Moreover, the South has over 4 million with less than five years of education, or 48% of the total in the nation. More than 5½ million persons in the South have only five to eight years of education, or 40% of the total in this group in the United States. Thus, the South has more than its share of functional illiterates – people with only an elementary education – and less than its share of people with some high school education. (Appendix III shows these comparisons.)

Not only is educational achievement of adults in the region lower, but high school dropout rates are higher. From the 1958-1962 high school group, the region lost almost 40%, compared with 23% for the rest of the nation. This region raises the national high school dropout average to 28%. (Appendix IV shows detail on high school dropouts.)

Income Discrepancies

Statistics show a direct relationship between income level and educational attainment. Low income is considered both a cause and effect of inadequate human resource development, and it is significant that the median income of those with eight years education is \$3,000 – the commonly used criteria for the poverty level income. In median income and in the number of families with incomes below \$3,000, the South does not compare favorably with the rest of the nation. In 1960, median family income was \$1,200 per year less for the South. The South had 29% of the families in the United States, but it had 4.4 million, or 46%, of the families with incomes less than \$3,000 – some 56% more than its share based on population. (Appendix V shows regional and United States comparisons for median family and other income levels.)

Inferior Employment Opportunities

The manpower problems of the South are also shown by statistics on employment. The percentage of workers engaged in agriculture is higher for the region than for the rest of the United States, while the percentage in white-collar occupations is lower. Similarly, the South has less than its "share" of durable goods manufacturing employment, but more than its share in nondurable goods industries. The net result is lower earnings for the Southern worker. (Appendix VI shows employment by industry for the region and the United States and additional details are given in Appendix VII.) A smaller percentage of the population participates in the labor force (with a lower male participation rate as well) and a higher percentage of those employed work less than 40 weeks per year. Hidden unemployment – those people who are underemployed or insufficiently employed but do not appear as unemployment statistics – is considered more prevalent in the South. Using a number of persons with incomes of less than \$1,000 as a crude approximation of hidden unemployment, our region, with 26.5 million persons (29% of United States total), had almost 8.5 million persons with some earnings, but total income of less than \$1,000, or almost 37% of the nation's total.

Rural and Urban Manpower Development Problems

Manpower development problems are often more difficult in rural areas because of the general lack of facilities, transportation, communications and the traditional dependence on agriculture. The South, with over 41% of its population in rural areas (only 30% for the United States), has almost 3/5 of its low income families as rural residents. (Appendix VIII shows location of low income families for the region.) Part of the rural problem is that the farms are so small and ill-equipped that insufficient income can be generated from them. The average acreage for all farms in the South is 26% less than the national average. Seventy per cent of the nation's Class VI commercial farms (those with less than \$2,500 in annual sales) are in the South. (Appendix IX has data on commercial farms.)

Large numbers of poorly educated and untrained rural people without work migrate to cities and contribute to their rapid growth and manpower problems. There are 13 cities in the South with over 500,000 population. In five of these large cities, for the five "poorest census tracts," it is indicated that the median family (including unrelated individuals) income is less than \$1,200. These cities are Baltimore, Atlanta, New Orleans, Memphis and Norfolk-Portsmouth. The median income for the five poorest census tracts is slightly higher in the other eight large cities in the South (Houston, Dallas, San Antonio, Miami, Louisville, Birmingham, Fort Worth and Oklahoma City) but in none does the median income for this group exceed \$1,620. For the region as a whole, 1.4 million families with incomes less than \$3,000 lived in the 76 standard metropolitan statistical areas of the South.

Because of inadequate educational levels, work experience and training, many Southern workers who leave rural districts for urban centers are unprepared to participate in the urban job market. Although unemployment and low incomes are at present lower in percentage terms for urban areas, the number of jobs available to unskilled workers continues to decline. A move to the city rarely relieves the unskilled worker's employment problems.

Negroes – An Underdeveloped Manpower Resource

The relatively large Negro population of the South (20% vs. 11% for the nation), plus practices of racial discrimination and segregation, add another dimension to the regional problem. On every statistical comparison – education, income and employment – the nonwhite population is in a less advantageous position than the white population. A major part of the regional training effort should be directed toward this group. Such is not, in fact, the practice. The result is seriously inadequate development of this segment of the region's human resources.

Educational attainment of Negroes averaged only 70% of the white for the region. It has been noted that attainment for the whites of the South is below the national average. Nonwhite median annual income for the region, at \$2,322, is almost \$3,000 below the white. (Appendix X provides details for the region.) The South has over 62% of all nonwhite families in the nation with incomes below \$3,000. (Appendix XI gives the geographical location of these families.) Unemployment rates are almost double for Negroes as compared with whites, and underemployment and hidden unemployment are much more prevalent for Negroes. Those who are employed are concentrated in the lower paying occupations. (Appendix XII shows this concentration for the United States and the region.)

Conclusion

The large number of persons in need of training constitutes the most serious manpower problem in the South. With a much lower economic base and many poor schools, the South is called upon to provide special training for a much larger percentage of its labor force than the rest of the nation. The special problems of rural residents and Negroes make the situation more complex and difficult. The task of training is immense, yet its accomplishment is essential to the South and to the nation.

Chapter III

MANPOWER TRAINING PROGRAMS

The previous chapter indicates that present manpower training programs in the South are not capable of serving the tremendous needs of the region. The dimensions of the problem make it imperative that these programs operate at a greatly expanded level, taking advantage of all resources available and that they develop rapidly increasing capacity. An examination of the major manpower training programs and state agencies responsible for them and for related activities provides some guides for this effort.

In each state, the survey included programs under the Manpower Development and Training Act, the Economic Opportunity Act, the Vocational Education Act and related activities. Visits were made to departments of employment security, departments of education, offices of the Bureau of Apprenticeship and Training, AFL-CIO Councils and other organizations concerned with basic education, vocational and job training. Each program and agency has its own plans, resources and record of achievements. Each also has its own problems of limited funds, inadequate staff, legislative and policy restrictions and the inhibitions of tradition.

MDTA Training

Under the Manpower Development and Training Act of 1962 as amended, each state may operate MDTA institutional, experimental and demonstration, and on-the-job training projects. Table 3 shows the number of institutional training projects, the number of approved trainees in such projects, and the same data for experimental and demonstration projects. These are compared with the number of unemployed and poor farmers (Class VI) in each state.* Some states have engaged in much more training than others. Only 487 workers were approved for training in West Virginia (9.4 per 1,000 unemployed and Class VI farmers) compared with 4,058 in Oklahoma (86.2 per 1,000 unemployed and Class VI farmers). The same disparity was evidenced in experimental and demonstration projects. North Carolina had 4,325 enrolled in such projects compared with five states in the South that had no such projects.

Table 4 shows the amount of on-the-job training in the United States and the South. As of 1965, on-the-job training has been a much smaller program than institutional MDTA training. Federal officials have recommended expansion of on-the-job training. One area that holds possibilities that have scarcely been tapped is on-the-job training in-service industries. Although little on-the-job training has been carried on in the nation as a whole, there has been even less in the South. Some state and Bureau of Apprenticeship and Training personnel noted the difficulties of operating effective programs with limited staff and heavy work loads. The added functions of probing for racial discrimination, administration of the new on-the-job training programs, and other new duties were being performed without additional staff, and in some cases with reduced staff. Another problem mentioned by some personnel was that institutional and on-the-job training were reaching the more highly educated unemployed persons rather than those with greater training needs. At present, no states are making a systematic study of on-the-job training in industry. Before a comprehensive on-the-job training program can be inaugurated, such studies are needed. The present method of servicing primarily those industries which approach Bureau of Apprenticeship and Training personnel leaves much to be desired. More staff and greater effort for positive action are needed to expand such training.

A number of problems were noted on MDTA projects. Slowness in funding projects and a backlog of unfunded projects were reported for a number of states. Part of this difficulty will be solved by the

* Class VI commercial farms are those which sell \$50 through \$2,499 value of farm products. The farm operator is under 65 years of age, does not work 100 or more days off the farm and earns more on the farm than off the farm. This group is obviously a poor group. From their gross sales must be subtracted the expenses of running the farm.

Table 3

INSTITUTIONAL TRAINING AND EXPERIMENTAL AND DEMONSTRATION PROJECTS
UNDER THE MANPOWER DEVELOPMENT AND TRAINING ACT, BY STATE, 1964

	Institutional Training			Experimental and Demonstration Projects		
	Projects Approved	Trainees Approved	Number of Trainees Per 1,000 Unemployed And Class VI Farmers	Projects Approved	Number of Individuals Served	Number Served Per 1,000 Unemployed And Class VI Farmers
UNITED STATES	2,552	171,635	44.4	111	30,140	7.8
Alabama	13	5,100	70.4	2	395	5.5
Arkansas	27	981	22.8	0	0	0
Florida	68	4,813	48.7	2	400	4.0
Georgia	43	4,007	*	0	124	*
Kentucky	98	2,931	37.4	1	125	1.6
Louisiana	14	905	13.2	0	0	0
Maryland	29	2,074	43.3	5	1,200	25.1
Mississippi	1	2,095	31.6	0	0	0
North Carolina	27	3,196	29.7	4	4,325	40.2
Oklahoma	13	4,058	86.2	0	0	0
South Carolina	9	1,080	20.6	0	125	2.4
Tennessee	43	2,795	29.6	1	525	5.6
Texas	91	3,598	20.3	0	0	0
Virginia	46	2,986	46.6	3	325	5.1
West Virginia	8	487	9.4	2	125	2.4

* Data not available

SOURCES: Manpower Report of the President, 1965, Tables D-3, F-1, and U. S. Census of Agriculture

Table 4
ON-THE-JOB TRAINING, 1964

	Trainees Approved for On-the-Job Training	Trainees Approved Per 1,000 Unemployed And Class VI Farmers ¹
UNITED STATES	27,605	7.1
Alabama	60	0.8
Arkansas	126	2.9
Florida	177	1.8
Georgia	450	²
Kentucky	240	3.1
Louisiana	1,319	19.2
Maryland	344	7.2
Mississippi	1,026	15.5
North Carolina	1,441	13.4
Oklahoma	75	1.6
South Carolina	52	1.0
Tennessee	409	4.3
Texas	1,267	7.1
Virginia	173	2.7
West Virginia	60	1.2

¹ Includes 6,908 trainees in Experimental and Demonstration Projects and 2,080 under the CAUSE Program.

² Not available.

SOURCES: Manpower Report of the President, 1965, Tables D-3, F-1 and U. S. Census of Agriculture.

recent decentralization of approval authority and permission to fund training projects up to \$75,000 without Washington approval. However, allotted funds often do not cover the costs of all programs the states have been encouraged to develop. Those projects which have been completely developed with full state and local support in anticipation of funds which fail to be appropriated set back the entire program and waste valuable staff time. In addition, this gives rise to political pressures in support of particular projects.

There apparently is no problem in recruiting sufficient trainees in most states. However, the extent to which those most in need of training are being served is another matter. Aside from some special efforts established for youth programs, recruitment has been a rather casual affair and, for the most part, any kind of out-reach technique has been lacking. No recruitment pattern was found and little or no evaluation of the process. There is little evidence that determination of training programs and recruitment are conducted with the needs of the large number of Negro trainees in mind. Instead, there were cases of ignoring requests for training from Negro groups and some recruiting efforts were designed to satisfy only token integration of training courses. In general, recruitment practices have not served the needs of the hard-core unemployed and underemployed, but have tended to favor the better-qualified trainees who could obtain jobs without the training but find a better job because of the additional training. This is not considered necessarily bad, but it compromises the objectives of serving the hard-core unemployed.

There seems to be no defined method for determining over-all state needs for training courses that could be operated each year within the funds available. For example, in North Carolina, 1,297 were being trained as hospital aides and in other medical service work, compared with only 49 in Texas and none in other states. On the other hand, Texas was training 1,856 in the clerical field, compared with only 375 in North Carolina. Course selection is generally on a first come, first served, hit-or-miss basis, supplemented by "squeezed in" courses where job application files were thick, or "sneaking in" a course for draftsmen since they could be easily placed.

The testing and evaluation of the characteristics and qualifications of potential trainees to determine their training needs should be improved. For example, no value is derived by training an unemployed woman to be a nurse's aide when a medical examination would indicate that she needs to be in a tuberculosis sanatorium. Nor should a person with poor coordination be placed into training to become a draftsman. The majority of the testing is for general screening purposes and not to determine each individual's training needs and job potential. It is popular to talk about worker-centered training, but the practice is to select on a general level of accomplishment, rather than determine course assignment on specific abilities and interest. University psychology departments have many capabilities that could make valuable contributions to this process.

Occupational guidance and counseling for potential trainees could only become meaningful when we achieve reasonable success with the above testing goals. But where we have usable information about training potential we cannot afford the waste of not applying it properly through adequate guidance services. However, agencies reported a severe scarcity of trained guidance personnel and a limited number of allocated guidance positions for employment security agencies. Under these circumstances, altogether too many trainees are assigned to training slots in a wastefully haphazard manner, instead of being assisted to make a choice based on the best available knowledge. More funds are needed to hire guidance staff, incentives are required to induce an increased output of trained guidance counselors from our universities, and more in-service training should be provided for guidance staff members.

There seems to be ample evidence, most of it gained in experimental and demonstration programs, that supportive services for particularly hard-core trainees, make valuable contributions. These include health services, guidance and counseling for trainees and family, transportation, housing and welfare services. Many of these services must be continued on a follow-up basis until the trainee is well established in a job. However, the real value of these services is not widely known, nor are sufficient funds available to provide them in most cases. The professional staff needed to perform many of these functions is in extremely short supply.

Evaluation and research studies on training programs are often neglected and published evaluation studies are not widely distributed. Studies are going on at the operating level, but closer supervision of

how they are being conducted seems to be needed. Standards for evaluation and research need to be established and rigorously applied. Reports on follow-up studies are made but the breakdown begins with the use of inconsistent terminology and techniques in report preparation and extends to faulty distribution of results. The real need is an active programmed effort with adequate budget and staff to see that these valuable findings are known and applied where needed. Inter-university faculty research teams with proper direction and support could participate on a more active basis in evaluation and research studies.

Office of Economic Opportunity Programs

The scope of Office of Economic Opportunity training activities varies considerably throughout the 15-state region. Youth programs are well under way, but training for adults is only beginning. To the extent that job training activities are successful, they make a real contribution toward rehabilitation of the unemployed.

JOB CORPS

Ten of the 15 Southern states have Job Corps Centers in operation. The five nonparticipating states are Alabama, Georgia, Louisiana, Mississippi and South Carolina. Of these, two states — South Carolina and Louisiana — are in the "talking stage" concerning the location of a center within their boundaries. None of these states seems to be having any difficulty in filling its Job Corps quota. Recruitment techniques are a subject of concern in several states, the feeling being that the program is not reaching the young people who need it most. In one case, our interviewer ran into a special program which replaces both employment security and Women in Community Service recruitment. It is evidently a step taken to avoid an admitted "white-bias" on the part of the Employment Security Commission.

WORK EXPERIENCE

State departments of public welfare have been given the administrative responsibilities for the Work-Experience Program under Title V of the Economic Opportunity Act which should greatly increase their job training activities. This program has been administered differently by various state departments of public welfare. In South Carolina, the state office explained that there was no interest in formulating a program. In North Carolina, a program has begun in nine counties, but not the others. Two persons have been added at the state level in an attempt to activate more programs at the county level. In Tennessee, programs have been initiated in three of the largest metropolitan sections of the state and plans are going forward to start others in three rural counties. The largest program is of West Virginia, which received \$11,000,000 to train 12,000 persons in 500 centers in the state. Of the 12,000 persons, 10,000 are unemployed fathers of Aid for Dependent Children clients and the other 2,000 are mothers under the same program. Several additional staff members have been added to the West Virginia Employment Security Office to place the trained workers, and additional social workers have been added to help trainees in this program. In several states it has not been possible to get this program for the real hard core properly started. Of all OEO programs, implementation of the Work-Experience Program has apparently been the most difficult. In Alabama, the program has been withheld because the Bureau of Public Assistance is both understaffed and underfinanced to the degree that it cannot meet the relatively small matching provisions. The development of a program in Texas is hinging on a legal maneuver to skirt the state constitutional restrictions on the use of state monies for welfare. Two states, North Carolina and Oklahoma, commented on the difficulty of finding trainees.

WORK-STUDY

Every state in the region is taking advantage of the work-study training program, with most schools participating. Some of the state OEO directors keep closer tabs on the degree of participation than others. No serious problems were cited with respect to this program, although in South Carolina it was noted that one white school has canceled the program for lack of students who qualified for assistance. The financial restrictions for participants are not always compatible with educational costs, and many who need this assistance are eliminated. In addition, the general practice of recruiting students who are already in school bypasses those without the financial means to get enrolled.

NEIGHBORHOOD YOUTH CORPS

Evaluation of Neighborhood Youth Corps activities range from "excellent" in most states to "problematical" in a few. In Texas, the program has had minimal success. According to state OEO administrators, two problems were responsible for its failure: an excessive amount of paper work, and the \$1.25 minimum wage ruling, which has also resulted in problems in other areas. Yet, in neighboring Oklahoma, as in most states, the program has received enthusiastic support. State officials noted the importance of local leadership and credited, in part, the success of their Neighborhood Youth Corps centers to strong leadership on the part of the directors.

ADULT BASIC EDUCATION

Of all the training programs possible under OEO, Adult Basic Education has been the greatest laggard. At the time of our interviews, most stages had not gone beyond the point of appointing a director and any evaluation of the program is premature. It is striking that this program, which is fundamental to all other programs for many people, is the least developed.

COMMUNITY ACTION PROGRAMS

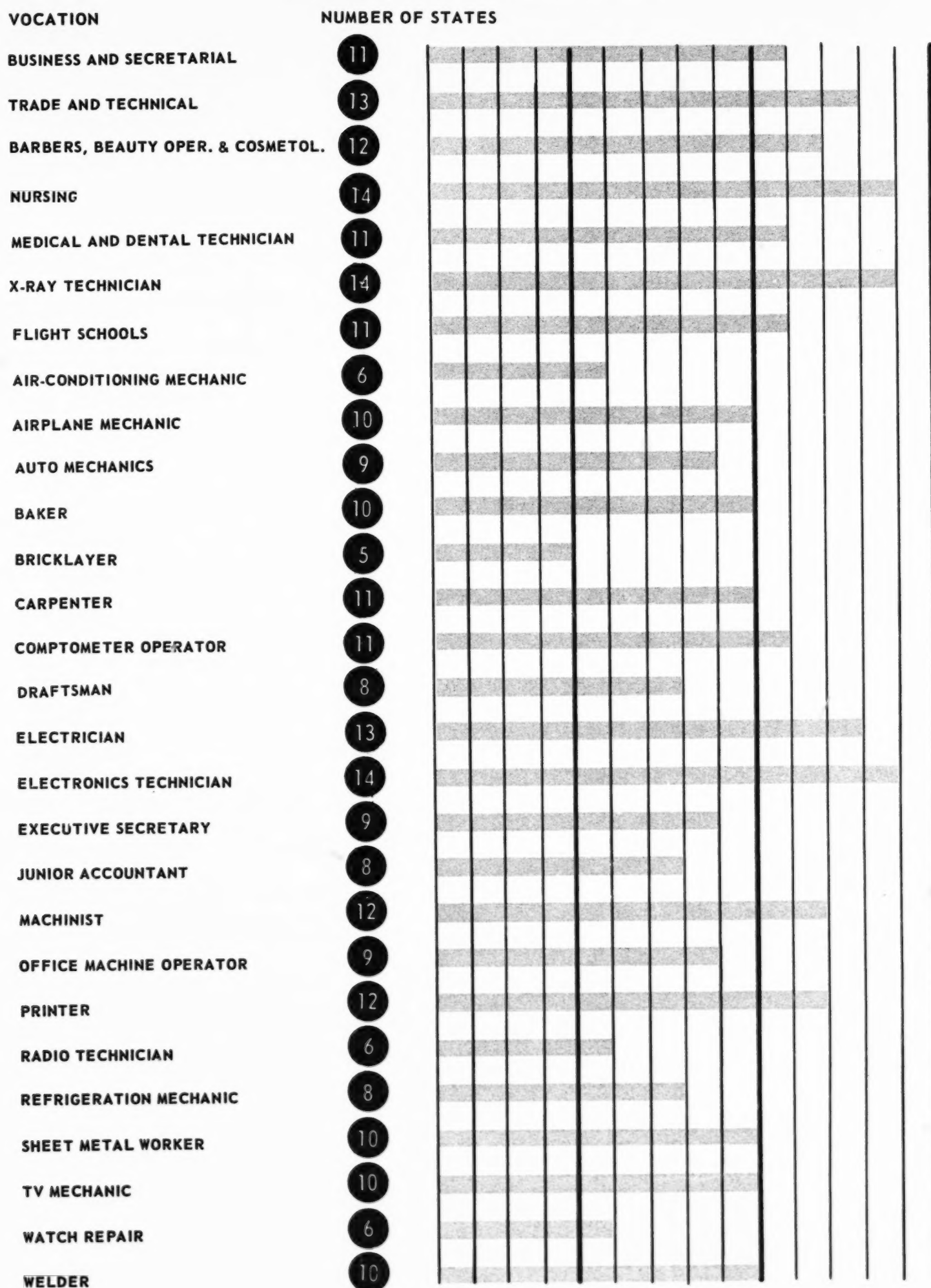
All state offices seem to be approaching the development of Community Action Programs activities with apparent gusto, but many are suffering difficulties in breaking through static local political, economic and social patterns and reaching the real deprived citizens. There is little evidence that local Community Action Programs have done much with the development of manpower training components.

Vocational Education

The South has fewer students enrolled in vocational courses than the rest of the nation. Only four of the 15 Southern states have numbers above the national average enrolled in distributive education classes; only three Southern states have an above average number of students enrolled in trades and industries courses; and only two states have an above average enrollment in technical education. The South also has fewer post-high school vocational schools. (See Figure 1.) The Vocational Education Act of 1963 has enabled states all over the country to expand their vocational offerings, and they have responded. Fortunately for the South, the formula adopted for federal aid is based in part upon per capita income, so that the South should receive an above average amount of the allotted money. Here, as in manpower training agencies, those working in the field pointed out the need for increased and improved testing and guidance of trainees. Improved tests are needed to determine vocational aptitude since present tools show little correlation between test grades and success in completing vocational training. Improved occupational guidance and counseling were repeatedly suggested for vocational students. Some educators feel that guidance counselors need to be placed in the elementary schools. Unfortunately, the South has fewer guidance and counseling personnel than the rest of the nation. An additional difficulty is the lack of knowledge among guidance personnel in regard to occupational counseling. Some universities have conducted special institutes for guidance personnel in occupational counseling but this has been only a stopgap measure. Proper guidance for trainees is a crucial part of the training process and qualified counselors must be educated and trained in increasing numbers.

As vocational training activity has expanded, vocational educators have joined others in the manpower training field in attempting to find out what jobs are available. A South Carolina study by the Committee for Technical Education analyzed the labor availability for vocational training within a 30-mile radius. The Florida Department of Education conducted a similar job study because it lacked confidence in those conducted by employment security. In Kentucky, a private organization called Spindletop, under contract with the state, is conducting an extensive study on manpower resources and industrial needs in a 20-county area around Lexington to provide guidance for building a vocational school. In spite of the increased activity, the job forecasting results are not too satisfactory. University researchers often are not utilized effectively, and industry for the most part, resists active involvement and is not as helpful as it might be in providing comprehensive job information.

Figure 1
VOCATIONAL SCHOOL DEFICIENCIES
 Number of Southern States With Fewer Schools
 Than the National Average
 (Per Population 18-20 Years, by Vocation)



Employment Security Offices

The employment security office is a major point of contact for people without work who need the help of training programs. The methods of operation and performance of assigned functions have a direct bearing on the effectiveness of manpower training. These offices service all MDTA programs, aid in recruitment for OEO training programs, and have special responsibilities for other human resource development programs. In almost all cases, their effectiveness is limited by the traditional practice of serving, primarily, those who walk into their offices. Staff and budget limitations result in little or no service to rural areas, and inadequate or ineffective contact with employers. The general result has been that employment security offices serve mostly those with high school educations in metropolitan areas. Identification of job training needs and placement records are not satisfactory. However, the effectiveness of performance varies from state to state and within states, depending on the type of task.

The problems of recruitment and the difficulties of providing appropriate guidance and counseling have been discussed. Jobs for which people are needed should be identified accurately before training begins, but this is not always effectively done. State employment services conduct labor market surveys, often with a specific industry in mind, although the validity of these surveys, even with given definitions and standards, is almost universally questioned. The surveys, at best, enumerate only the jobs presently available among respondent large employers, and provide little or no information on potential jobs that will or could develop. To get this information is no easy task, but strong efforts in this direction are essential for improved manpower development.

The placement of unemployed persons on jobs is the primary test of manpower program success. Table 5 shows how the percentage of all placement by employment security offices has changed over a period of years and gives an indication of the effectiveness of this service. Placements in the United States have lagged behind population growth. Although the need is greater, the record is even worse for the South than for the nation. The record over the last few years has been more favorable but more must be done. The inefficiency of operating too many small staffed offices is one problem. On the other hand, without some small offices, outlying rural areas will not be reached at all.

Not only is the number of offices important, but their location as well. In Oklahoma, no changes have been made in the location of offices over a period of years, even though population changes have been significant. In North Carolina, a mobile unit exists to service more remote sections of the state. In a number of states, a centralized mechanism by which jobs can be made known and filled on a state-wide basis is lacking. The effectiveness of interstate clearance of jobs is in need of study.

One of the major advantages of a decentralized public employment service is that the various states may experiment with new techniques, special services, and research. Such experimentation is occurring and many of the more promising practices are in need of more detailed observation and evaluation. Additional research activity should be encouraged. For fiscal year 1965-1966, only one state agency, West Virginia, requested special research funds from the budgeted reserves maintained by the U. S. Employment Service for the individual state's use upon request. To the extent that innovations are being developed, they need to be accurately recorded and widely publicized. Under a properly designed program, universities would supply qualified personnel to assist with this evaluation and special research.

Labor Unions

Labor unions are required to be involved in formal apprenticeship training and they have a vested interest in training programs in general. Labor officials express as a major problem the fact that workmen too often learn only a fraction of what they should know to be skilled craftsmen. The machinist craft in large plants may be diluted into 20 different assignments, and many workers classified as machinists are little more than machine tenders. Because of this lack of training, severe shortages exist for journeymen and master craftsmen in many trades. In many cases, the length of time required for

Table 5
COMPARISON BY STATE OF PERCENTAGE POPULATION CHANGE
AND PERCENTAGE PLACEMENT CHANGE, 1947 TO 1960,
AND LABOR MARKET PLACEMENT PARTICIPATION DURING 1963

	Percent Change 1947-1960		Nonagricultural Placements, 1963 ¹ (In thousands)	Placements per 100 Nonagricultural Employment - 1963
	Population	Regular Placements		
UNITED STATES	+ 24.8	+ 1.1	13,818	15
Alabama	+ 9.2	- 52.8	121	15
Arkansas	- 5.4	- 28.2	108	26
Florida	+ 95.5	+ 38.1	263	18
Georgia	+ 18.1	+ 1.6	161	14
Kentucky	+ 12.5	+ 29.0	67	10
Louisiana	+ 23.6	- 10.0	89	12
Maryland	+ 37.6	- 9.6	89	9
Mississippi	+ 4.0	+ 5.3	110	25
North Carolina	+ 21.9	+ 35.0	151	12
Oklahoma	+ 7.2	- 31.7	165	27
South Carolina	+ 23.0	- 17.9	85	14
Tennessee	+ 11.5	- 25.5	118	12
Texas	+ 31.1	- 3.2	471	18
Virginia	+ 26.8	- 8.5	107	10
West Virginia	+ 4.8	- 45.1	46	10

¹ Corrected to February, 1964

SOURCES: William Haber and Daniel H. Kruger, *The Role of the United States Employment Service in a Changing Economy*, Kalamazoo: The Upjohn Institute, Chart 2, page 83, and Statistical Abstract of the United States, 1964, Table 409, page 302, and Manpower Report of the President, 1965, Table D-1, page 239.

completion of apprenticeship training is felt to be excessive. It is estimated by some industrial and training officials that the process of becoming a journeyman can be speeded up by a factor of 2 or 3. One industry visited, when faced with an unanticipated and urgent need to train a whole new group of craftsmen, found that it could be done in much less time and result in better workers than the traditional training programs. Restrictive entry practices of the crafts tend to perpetuate themselves because of the relatively limited number of journeymen to which apprentices can be assigned. Further aggravating the problem of restrictive entry is discrimination against Negroes in apprenticeship training programs. Industry seems too often content with existing practices since apprentices mean low trainee pay rates. The net result is a "frozen" pattern of training which provides insufficient quantity and quality of trained workers to meet modern industrial conditions and growing job needs. One union official suggested that the union movement must take on the task of upgrading and retraining the work force, or workers are going to be trained elsewhere and lose their allegiance to unions.

Unions in the South lack strength and resources to deal with these training problems. Table 6 shows the number of apprentices in 27 trades in the United States and in the South. In comparison with the number experienced in a trade, there are fewer apprentices in the South in 20 of the 27 trades. The table shows that, for the United States, certain trades have few apprentices; yet even in these trades there are relatively fewer apprentices in the South. Attention is directed to the last column which shows the number of states having no apprentices in particular occupations.

An interesting union labor mobility problem is the extreme amount of cross-country moving required of building trade members. For example, a local of 1,500 members can have 1,000 members scattered coast-to-coast on jobs of a few months' duration. As each project is completed, union laborers move to the next job which may be from 50 to 1,500 miles away. Only the few workers with many years of seniority stay close to their home local. The unions must make many expensive long distance phone calls to service their large number of out-of-town members. The present system is expensive, inefficient and difficult to administer. More effective techniques of job anticipation, location and assignment are needed.

Union labor attitudes toward MDTA training programs varied considerably from state to state. At one regional meeting, labor union leaders in the building trades overwhelmingly voted to abolish MDTA in the building trades. They claimed that they had a workable apprenticeship program already being administered by labor unions, and that no other programs were needed. It was alleged that MDTA only half-trained people who then went on the labor market at low wages to beat down the union scale. Another official felt that no money should be used for MDTA programs for jobs which paid less than \$1 an hour. Improvements suggested were that the MDTA programs should be lengthened, and that local advisory committees should exist for every project. Another labor official, less critical of MDTA, contended that MDTA was concerned with workers at an entry level which is considerably below regular union apprentice training and that he finds no conflict between this entry-type training and union apprenticeship training. He maintained that too many union people, particularly at the local level, take too narrow a view of MDTA.

It was obvious that state labor councils are badly understaffed while being burdened with a multitude of functions to be performed. They are seriously handicapped in keeping informed on national needs and manpower training and development programs. They are unable to aid effectively in program design and development, or to accurately reflect their function and value to member unions and to the rank and file. An active program to aid state labor officials in performing these tasks is needed to increase acceptance and participation of unions in manpower programs.

Related Development Programs

A number of federal agencies with responsibilities for economic development programs contribute to development of human resources in ways other than training. Though it complicates the information problem for the operating staff of training programs, knowledge of the benefits of these programs is necessary when servicing trainees. Two of these programs have just begun - the Appalachian Regional

Table 6

REGISTERED APPRENTICES, BY CRAFT AND REGION

Craft	United States		South		Southern States With no Apprentices Regis- tered in Occupation
	Number of Registered Apprentices	Registered Apprentices Per 1,000 Experienced Civilian Labor Force	Number of Registered Apprentices	Registered Apprentices Per 1,000 Experienced Civilian Labor Force	
Bookbinders	601	21.30	36	7.12	9
Cabinetmakers	1,381	20.02	144	7.32	6
Concrete Finishers	1,702	35.71	283	17.45	4
Electrotypers and Stereotypers	647	69.75	87	47.77	3
Engravers except Photoengravers	63	5.41	2	0.87	13
Glaziers	1,321	82.81	306	74.72	3
Machinists	9,223	17.89	1,662	17.96	-
Painters, construction and maintenance	6,874	16.52	1,472	10.95	-
Pattern and Model Makers except paper	825	20.39	95	24.18	5
Photoengravers and Lithographers	1,955	78.38	87	24.55	7
Plasterers	1,429	27.02	282	19.70	1
Pressmen and Plate Printers	3,156	41.85	334	24.43	1
Roofers and Slaters	2,227	40.57	790	46.52	3
Designers and Draftsmen	748	2.61	30	0.63	9
Bakers	260	2.30	9	0.43	13
Boilermakers	721	26.83	295	34.07	4
Carpenters	24,296	26.29	5,100	16.04	-
Compositors and Typesetters	4,736	25.88	634	17.55	1
Electricians	20,518	57.71	5,610	58.19	-
Linemen and Servicemen, telegraph, telephone, power	1,843	6.62	309	4.12	4
Brickmasons, Stonemasons and Tile Setters	8,241	39.69	2,088	31.23	-
Millwrights	1,330	19.59	283	23.07	2
Molders, metal	711	13.62	116	14.62	4
Plumbers and Pipefitters	21,739	65.67	4,833	53.75	-
Structural Metal Workers	5,164	78.04	1,137	64.54	1
Tool Makers, Die Makers and ^d Setters	9,765	52.33	515	46.27	1
Stationary Engineers	958	3.47	41	0.55	12

SOURCE: U. S. Bureau of Census, 1960

Development Act and the Public Works and Economic Development Act of 1965. The U. S. Department of Agriculture also has resource development responsibilities, particularly in rural areas.

Much effort has been devoted to attempts to eradicate rural poverty in the United States. One major program is the Farmers Home Administration which has been broadened and expanded under the Economic Opportunity Act. Since the South has more poor farms, more Farmers Home Administration aid has been channeled to the South than to the rest of the country. In proportion to the number of poor farms (Classes IV, V and VI), however, 10 of the 15 Southern states have not received their share of Farmers Home Administration operating loans. Within the Southern states there is much disparity in the use of operating loans. For example, as of January 1, 1964, there was \$51,485,000 outstanding in operating loans in Texas, compared with \$8,354,000 in Kentucky. Yet the numbers of Class IV, V and VI farmers are relatively comparable in the two states.

Recently, the U. S. Department of Agriculture inaugurated a new program – the Rural Community Development Service – which should prove valuable to rural residents. The agency will identify programs applicable to rural problems and determine the specific actions needed in the field to assure that rural residents will have full equal access to their services. It will then attempt to see that such services are received. However, program leaders readily acknowledged that they do not yet have sufficient budget and staff to meet even a portion of the need.

Many other pieces of federal legislation provide for training and related human resource development. Also, a host of state programs play an important part. Given this kind of program mix, the information and communication tasks are staggering; coordination requirements are very complex and the number of program development possibilities are significant.

Program Operation Problems

The initiation of so many far-reaching human resource development programs in such a short period of time has radically changed the operating environment of state agencies. Suddenly they have a greatly enlarged sphere of responsibility in areas entirely new (or previously ignored) and their volume of work increased almost overnight. This becomes especially evident where economic opportunity programs have been added on top of existing manpower training and vocational education activities. In addition, these agencies have been surrounded with other new development and training-related programs such as Appalachia, Area Economic Development and educational aid programs. The Civil Rights Act has added important considerations. The problems of becoming informed and keeping up-to-date are far from solution. A most disturbing lack is the absence of knowledge on the part of employment service administrators as to the records and data available to help determine training priorities. With proper stimulus, university researchers should be able to provide answers to some of these questions by combining their academic knowledge and interest with the existing records and the knowledge and experience the administrators seem anxious to share.

The skyrocketing demands of communication and coordination within and between agencies are not being met. In state after state these were found to be almost overwhelming problems. Programs administered by different federal departments are not successfully coordinated at either the national or state level. For example, with responsibility for the economic opportunity programs divided between so many agencies, the importance of an established system of communications seems obvious. Yet, only a few of the states have devised any formal system of communications between the organizations involved in the development and augmentation of these programs. These scattered "formal systems" generally take the form of monthly committee meetings at which all agencies are represented. However, all too often it was found that a state's "war on poverty" consisted of limited, uncoordinated actions by the employment security commission, the department of education, the department of public welfare, the Women in Community Service, and the office of economic opportunity. An over-all "plan of attack," a review of tactics, an evaluation of gains and losses, and a feeling of unity seldom occur.

The tools of research, information technology and management analysis, need to be applied to bring orderly accomplishment of program objectives through improved operating methods and procedures. Attention also must be given to developing standard terminology for the human resource development

field that can be used on a consistent basis across the lines between the many disciplines concerned.

Long-range program planning and development across agency lines has not yet begun. The basic data needed for guidance in establishment of training functions and standards for measurement of progress have not been developed and none of the agencies faced with tremendous day-to-day problems has assumed this key responsibility. Long-range planning also must contend with the uncertainties of annual appropriations. Other complications have arisen out of the sudden increase in frequency and volume of federal-state relationships necessary for operating these new programs. This means increased paperwork, time consuming trips, meetings and conferences and delays for approvals and funds. The factor of slowness of federal action encourages counties to work directly with Washington through their congressional representatives in an effort to speed up the process. This generates considerable confusion and additional paperwork at the state and federal levels. Orderly planning becomes impossible, even if there were time and staff for it. Project operations at the city and county level, where the day-to-day business of manpower training and development must occur, become a "start-and-stop" affair with a very uncertain future. Some of these problems will be alleviated with experience, but increased attention to development of staff would speed the process.

Staff Inadequacies

Every new program arrives at the point where it must have trained people to do the work. This presents a four-fold problem to the many manpower development and related programs. (1) There are not enough qualified people to fill existing jobs, (2) qualified people are not being educated and trained in sufficient numbers, (3) the means available to train those already on the job are inadequate, and (4) pay rates are not high enough to compensate for the amount of training required and the extreme shortages that exist. (See Figure 2.)

All states surveyed faced these problems in varying degree, dependent in part on their level or program activity and effort in pushing these many new development programs. Program administrators said such things as "We are not really reaching the hard core," "If I could just get my staff in the habit of doing their job differently from how they did it yesterday," or repeated a string of "I don't know's" to questions about activities of other agencies closely related to their own. This reflects inadequate staff development. There were also many reports of inadequate salaries for professional specialist positions which contributed to recruitment and retention difficulties. Above the clerical level many kinds of professionals are needed: program administrators, guidance, counseling and welfare personnel, vocational teachers, researchers, job development specialists, program planners and developers, on-the-job training specialists, community development specialists, manpower specialists and a wide variety of sub-professionals. Many of these occupations require education and training in an interdisciplinary curriculum in the social sciences which has yet to be developed. Short, intensive courses for practitioners are needed now. Such programs must involve universities and require federal financial support. The practice of appropriating funds only for program operating costs for major, new, and untried human resource development efforts with little or no provisions for the education and training of essential staff means that such programs often fail or perform at substandard levels. We can ill afford low yield from these programs because of inadequate quality and quantity of staff. If the untrained are to be trained, we must train their trainers and the supporting program staffs as well.

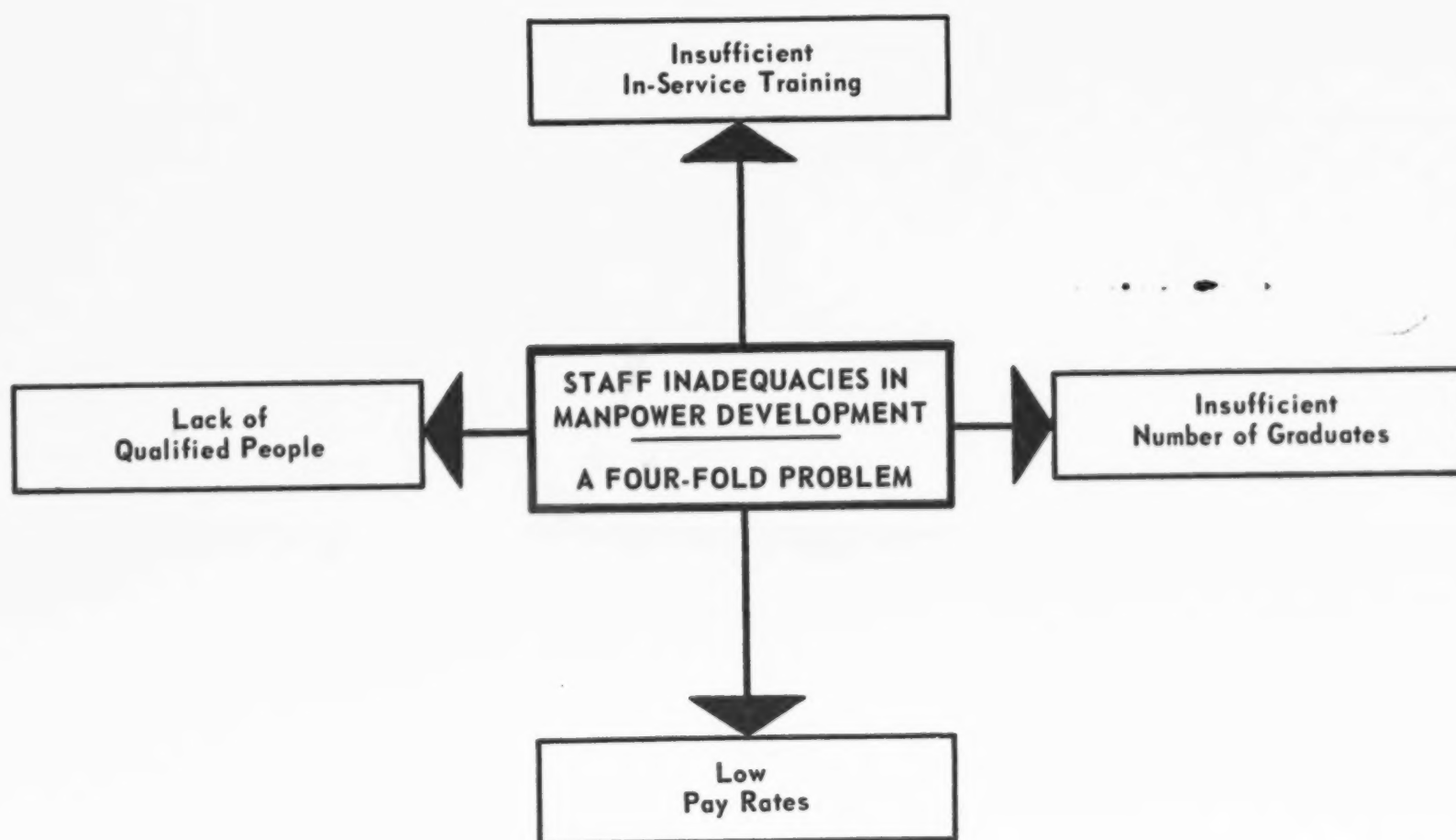
Lack of Job Information

There must be a "payoff" in terms of useful jobs for the successful graduates at the end of these many new training programs. This places a major responsibility on all program administrators and on the employment service. On a percentage basis, past placement of trainees seems adequate, but the skillful matching of workers and jobs is hampered by lack of information on job vacancies and the general unreliability of regional job forecasting. Lack of staff is one reason for the absence of aggressive job development programs and poor direction and insufficient training of existing staff is another. The lack of information about jobs on a state and regional basis is probably the greatest void in the manpower training field. One of our survey interests was to collect information on available jobs. All we have

larly true from our experiences the lack of useful information. This seems particularly true of regional job forecasts which are especially necessary when planning training courses of one- and two-years' duration. Some 41 occupational studies by university personnel were uncovered, but most were too small in scope, isolated or uncoordinated and thus had little regional impact. A proper combination of university and agency personnel could make some very necessary improvements in the performance of these tasks and could also provide stimulus for some job fractionalization studies.

Figure 2

STAFFING PROBLEMS OF MANPOWER DEVELOPMENT
AND RELATED PROGRAMS



Chapter IV

RESOURCES AND POTENTIALS OF UNIVERSITIES AND PRIVATE INDUSTRY

This is a summary of the many practices, concepts and potential capabilities discussed in regard to manpower development resources with our Southern universities and industries. The test of what to include was based on those ideas that occurred with sufficient frequency to deserve attention, on the testimony of experienced people in the field and the consensus of the project staff.

A great deal of interest and enthusiasm was found among faculty personnel for the increased national attention that resource development efforts are receiving. They welcomed the idea of regional programs in which they could participate and which would help support their activities. No one expressed the view that his participation in activities related to manpower development would be inappropriate, and a number of schools are making organizational adjustments to better meet the new demands of human resource development efforts.

University Resources

Universities and colleges are collections of experienced and new scholars engaged in seeking knowledge and applying their findings to human affairs. They represent tremendous resources of information, intellect and energy in all fields of knowledge. The focusing of these resources in Southern universities and colleges on regional problems of manpower development is an achievement which has great potential and is necessary if the region is to effectively and expeditiously move ahead in this effort.

One outstanding resource of universities and colleges is their combined research capability. Some outstanding faculty members have produced significant research, and many others are anxious to do more. The large number of professionals now engaged in the operation and management of manpower programs has been trained by our colleges. With the many new human resource development programs, the need for college trained professionals has increased many times. There is no doubt that our colleges have the capability to prepare the numbers required, but it is not yet oriented and organized for the interdisciplinary approach needed for the human resource development field. Similarly, the provision of short courses and conferences for training of practitioners is an activity in which colleges and universities have a great potential. Proper stimulation is needed for further development. A few colleges have provided actual job training through MDTA projects, both regular and demonstration. Increased training of sub-professional and technician level workers may be another possibility for use of the vocational training capacity of colleges.

RESEARCH

Examples of research currently under way and potential research interests are listed by subject matter areas.

Economics – A number of economists are engaging in research on human resource problems in the South, in such areas as manpower economics, regional labor market surveys, occupational forecasts, and economic development,¹ including the interrelation between human resources and economic development.² Very little work has been done on the Negro problem in the South.³ Almost all of this research is fragmentary. In many areas, multi-university research of a coordinated nature could be conducted in manpower economics, economic development and the Negro problem, and would result in increased and improved research findings.

Sociology – Several major areas of sociology are directly concerned with human resource problems including race relations, and a number of sociologists have published in this field.⁴ What impact Southern universities have had on the race relations problem would be difficult to determine, but the more enlightened viewpoint fostered by these institutions has undoubtedly helped pave the way toward better relationships between the races. One viewpoint is that too little research has been carried on in Negro colleges on the race problem. Urban sociology has given particular attention to adaptation of people to living in

the rapidly expanding urban areas. Only a little work has been done by sociologists in analyzing the regional aspects of the South,⁵ but more can be expected in this area in the future.⁶

Political Science and Institutes of Government – A relatively small amount of research in human resources is being carried on by departments of political science. One project, tentatively funded by the Ford Foundation, is designed to study discrimination in four major industries in the Southeast: textiles, steel, tobacco and chemicals.⁷ Possibly, a similar study could be made in the Southwest, where discrimination has existed not only against Negroes, but Mexican-Americans and American Indians as well. In general, institutes of government in the South have been understaffed and underfunded. One exception is the Institute of Government at the University of North Carolina, which has a staff of about 50 people. Almost three-fourths of the staff has been trained in public law. For a broad interdisciplinary approach, the institute includes specialists in political science, police administration, city planning, social work, sociology, psychiatry and psychology. In the last two years, the Institute of Government published 163 books or pamphlets.

Education and Psychology – A five-year Ford Foundation program of \$3 million to improve the education of culturally-deprived children will be conducted in three elementary schools in the city and county of Durham, North Carolina. In each school there will be a model team composed of a training specialist, a program specialist, a research specialist and an information specialist. The four major components of the "model system" will be to (1) develop a program, (2) train teachers in the program, (3) research and evaluate the program and (4) provide information on the program. This program will be administered by Duke University and North Carolina College, among other groups.

The high school dropout problem has been researched in several departments of education in the South. In Oklahoma, the major thrust has been to upgrade curriculum to hold students. In North Carolina, an MDTA program was formulated to aid dropouts.⁸ The University of North Carolina and Texas Southern College are studying the reasons for dropouts among college students. West Virginia University is not only studying this problem, but has broadened its research project to include reasons why some capable high school graduates do not go to college.

Little research was uncovered on the human resources problem in departments of psychology. Some work is being done in the area of motivation. For example, it was found that Negro children in two schools were so culturally handicapped that teachers at the kindergarten level not only had to teach in the classroom but also work with parents at home. In view of the importance of the motivation problem in dealing with people, it is hoped that more motivational research could be stimulated.

On the national level, the National Institutes of Health in 1962 funded a five-year project on improvement of pupil personnel services in schools. The project deals with the use of psychologists, counselors, nurses, social workers, physicians, attendance coordinators and speech and hearing clinicians in schools. This work has been so important that 16 other agencies, such as the American Psychiatric Association and the National Association of Social Workers, have joined in support of the program. The Interprofessional Research Commission on Pupil Personnel Services has been organized to administer the program. Four regional centers have been established, two of which are in our 15-state area – the University of Texas and the University of Maryland. At the latter university, one project deals with the use of child development consultants in elementary schools.⁹

At George Peabody College in Tennessee, research has been conducted on the impact of automation on vocational training and the use of teacher aides in the schools. This college also evaluates school systems. At the University of Oklahoma, the problem of the age level at which children arrive at vocational decisions has been researched.¹⁰ One implication of this study is that vocational counselors are reaching students too late.

Industrial Education – Little research has been conducted within industrial education departments in the South. One study at the University of Maryland attempted to determine what types of industrial arts programs would best suit students who eventually study college science curricula.¹¹ The staff in this department also has been studying the best methods of teaching industrial arts subjects.¹² At North Carolina State University, a study is being made of standardized tests to assist in student selection of technical curricula. The title of the project is "The Use of Ten EPSAT and DAT Standardized Tests in

Predicting Achievement in Technical Curricula."¹³ Also, a study was completed at Texas Southern University on "Occupational Choices of High School Seniors in the Space Age."¹⁴ The study was based on questionnaires filled out by 2,012 high school seniors in 18 high schools, 14 of which were all Negro.

Bureau of Business and Economic Research – Although a number of bureaus of business research have relatively large staffs, only a few of them are engaging in manpower research. Some bureaus have conducted labor market surveys, occupational forecasts, county income studies and population forecasts.¹⁵ While this research is worthwhile, a major problem is that few bureaus are making regular studies in labor market surveys and occupational forecasts. Most bureaus of business research are closely identified with industrial development programs and are interested in engaging in research that will assist state efforts to attract industry.

Agricultural Economics and Rural Sociology – Grants from the Cooperative State Research Service of the United States Department of Agriculture have supported a variety of research efforts. Projects S-44 and S-61 are comprehensive studies carried out in seven states in the South and administered through technical committees composed of faculty members from cooperating universities in each state. Charles Cleland, a rural sociologist at the University of Tennessee, is chairman of the committee organizing this research.

The S-44 study was entitled "Factors in the Adjustment of Families and Individuals in Low-Income Rural Areas of the South." The study involved the interviewing of the heads and homemakers of 1,908 households of open country residence in 30 low income counties in seven Southern states. The data obtained included the three focal areas of occupation-income, levels of living, and social participation, along with additional information on family structure, migrants in the family and a variety of attitudinal variables. Some 85 publications have been based on an analysis of these and related data.

A follow-up project, S-61, entitled "Human Resource Development and Mobility in the South," is to succeed S-44. This project will emphasize the processes of development and mobility. Aspirations of young people will be studied, and experimental guidance programs will be instituted in an attempt to affect aspirations. Three additional states were added to the S-61 project. Seventeen project leaders were selected from the various states, mainly from departments of agricultural economics, rural sociology and sociology. The Cooperative State Research Service provides an important example of what can be carried on in the way of cooperative multistate research.

Coordinated Research – A major trend developing among the more research-oriented universities and colleges in the South is to centralize social science research into one office on the campus. Most of these agencies have a full-time director to promote and coordinate research. Such centers have promoted more research; much of it is interdisciplinary. Florida State University has organized an Institute of Social Research. At the University of Georgia there is an Institute of Community and Area Development. At the University of North Carolina, not only is there a Social Science Research Institute, but within the Institute there are sub-groups – such as the Center for Urban and Regional Studies. At Duke University there is a new Center for Southern Studies, and at North Carolina State University there is a University Research Center. Howard University has a Community Related Research Program. West Virginia University established a West Virginia Center for Appalachian Studies and Development. The University of Kentucky has just established a Center for Developmental Change.

A project of North Carolina's State University Research Center gives an example of the research performed. Recently, the U. S. Commissioner of Education granted \$600,000 to this group to develop a "Center for Research, Development, and Training in Occupational Education." The director of the project is George S. Tolley, professor of economics. The Center will undertake a program of research and development on fundamental problems in occupational education. Another major function will be to upgrade training and education through conferences and short courses for volunteer leaders, vocational education personnel and researchers. The project will be interdisciplinary. In the section on agricultural and small communities, two principal investigators will be rural sociologists and the third an economist. There will be three associate investigators from sociology, another from education and three consultants, one from psychology and two from the State Board of Education.

To promote economic research, an Inter-University Committee for Economic Research on the South was organized in 1958. The Committee received a Ford Foundation grant in 1958 to encourage research

on Southern economic development. Under this grant, several conferences were held and research projects were financed throughout the South. The Ford Foundation did not renew this grant, and lack of funds has hampered this work.

In an attempt to coordinate research on both a multiuniversity and multidiscipline basis, a plan has recently been formulated in the Southwest, called the "Southwest College Research Plan." In this plan are 23 Southwestern universities and colleges from the states of Texas, Louisiana, Oklahoma and Arkansas. The purpose of the organization will be to sponsor collaborative research and development programs in academic and broad professional areas. The University of Texas is now drawing up more definite plans to be presented in a fall 1965 meeting.

There was unanimous and enthusiastic response to many possibilities that would be opened through greater participation of social scientists in human resource development research. Several department heads felt it would be feasible to double the number of Ph.D. candidates in the manpower field by providing adequate support and supervision for thesis research. A program to provide research opportunities for faculty along the lines now widely used for years by ORINS in the sciences would find widespread acceptance. These programs are a means of greatly strengthening research capabilities of faculties and would increase the capacity for the pertinent preparation of the many professionals needed in manpower development and related programs.

PREPARATION OF PROFESSIONAL STAFF

As previously indicated, there is a serious shortage of well-trained professional personnel in the rapidly developing and expanding human resource development programs. These people must be trained in our colleges and universities, but there is little organized effort in this direction. A review of social science course offerings in the human resource field provides information basic to discussion of professional education and practitioner training.

Course Offerings - At the professional level, the various departments concerned with human resources are just beginning to expand their offerings to fit more nearly the new programs and their needs. Perhaps the most impact on manpower training is from schools of education because of their emphasis on teaching basic skills and on guidance. Faculty in such colleges influence students, who then go out and reach many more elementary and high school students. Of 49 larger colleges (over 1,250 students) in the South, 18 have five or more courses in guidance or counseling. The typical courses offered are guidance, counseling, occupational information and educational information, supervised practice in guidance and counseling, organization and administration of guidance programs, and advanced guidance and counseling. But, in our sample of schools, only one offers a course in deprivation and education. There has been some concern that guidance in schools of education has been heavily oriented toward personal problems of individuals and too little concerned with occupational guidance. Several schools are working to improve the occupational emphasis. In addition to the guidance field in education, educational psychologists have been offering a number of courses in child development, adjustment and motivation.

Sociology offers a number of courses in human resources. These courses appear to be most pertinent: urban sociology, the community, minority groups, rural sociology, juvenile delinquency, social structure, and race and culture. Of a sample of 49 large colleges in the South, at least 16 offer the above courses. Only six offer a course on the South as a region. Three provide a course in "Occupations and Professions."

One of the six or seven major fields in economics is labor economics, which deals partially with manpower problems. While many labor economists have diverted their attention from the collective bargaining aspects of labor to that of labor markets, there is some question as to what extent the new material has found its way into college curriculum, textbooks, and classroom lectures. When college curricula in labor economics are analyzed, it is found that little attention is devoted to manpower as a resource in the elementary labor economics course. Most of the courses deal with problems of labor unions, as do advanced courses in this field. (Appendix XIII presents detailed information on course offerings in labor economics.) It appears that more than 75% of the total teaching in the field of labor is devoted to labor relations, and less than 25% to labor markets. Or, to state the matter differently, more

than 75% of the teaching effort treats labor as a philosophy, or as an institution, while less than 25% treats labor as an economics resource. Of 49 larger colleges studied in the South, only five offer a course in social security and only three in manpower economics. One college offers a course on the "War on Poverty." It may be concluded that the economic curricula in Southern colleges and universities have not remained abreast of the changing problems in the field of labor.

Schools of social work have offerings in the human resources area. Recently, the curricula of a number of schools have been broadened to include more environmental or sociologically oriented courses. Many schools of social work give considerable emphasis to mental health problems. This is because of substantial financial assistance for such training from the National Institute of Mental Health.

In political science departments, courses touching on the human resources area generally are in American government and public administration. The major courses in this area are state and local government, public administration, American national government, public personnel administration and administrative law. About half of the 60 larger Southern colleges studied offer the first three courses; at least 11 offer all of the courses listed above. Two colleges offer a course on "Civil Rights and Liberties" and another offers "Government and Social Welfare." These courses, with some variations, have a real potential for providing needed background information for personnel preparing to work in state, local and national government in the manpower development and related fields.

Finally, schools of agriculture have a number of courses in human resources. Most important are courses in agricultural economics and rural sociology.

These courses in the human resources field are not related in a meaningful fashion to produce the kind of professional worker needed for today's programs. The development of interdisciplinary curriculum at many schools throughout the region is overdue. Many university personnel recognize this and are exploring new possibilities for crossing disciplinary lines.

Professional Education and Training - At the University of Georgia, Professor Harold Nix of the Sociology Department is preparing a new curriculum in "Community Demography and Ecology." The degree will be in sociology, but it is anticipated that a new interdisciplinary degree in community development will evolve consisting of geography, economics, political science, psychology and social work. At the University of Oklahoma, a new master's program has been instituted to upgrade professional administrative personnel already in government service.

A Southern Regional Training Program in public administration has operated for many years. From six to eight graduate students a year take a quarter of work each at the Universities of Alabama, Tennessee and Kentucky. Graduates of this program fill many responsible positions in state and local government in the South. It has been estimated that from 20 to 40 students could be trained under existing arrangements. An expanded program could be so designed as to make a valuable contribution to the economic opportunity, manpower training and vocational education programs at state and local levels. Some schools of social work in the South expressed interest in expanding their training in the area of community development, with emphasis on human resources. Some schools of social work, notably the Kent School at the University of Louisville, are beginning to turn out a few community specialists.

A surprisingly large number of four-year colleges in the South have industrial arts departments for the preparation of teachers, some of whom might teach in manpower training courses. The major types of vocational training offered in 60 larger Southern colleges are as follows: drafting and design, 34 colleges; metal working (foundry, sheet metal, machine shop and welding), 30 colleges; woodworking, 26 colleges; electricity, 23 colleges; printing, 22 colleges; electronics, 18 colleges; and upholstery, 13 colleges. Less frequently offered were courses in masonry, 7 colleges; plumbing, 4 colleges; and painting, 2 colleges. One four-year college offers study in refrigeration; another gives vocational training in fire protection, a third offers aeromechanics, and a fourth, drycleaning. (See Figure 3.)

Existing courses combined with some new ones, and the developing interest in curriculum reorientation, make it possible to design effective and reaching programs for producing in significant numbers the trained professionals needed to operate and relate to the many new development programs. Special interdisciplinary curricula in the physical sciences, which were initiated with federal financial sup-

MAJOR TYPES OF VOCATIONAL TRAINING OFFERED
IN 60 LARGER SOUTHERN COLLEGES
(BY COURSE AND NUMBER OF COLLEGES)

31

port, have enabled the graduation of many needed professionals for new science programs. The application of this procedure to the social sciences can play an important part in improved staffing for manpower development activities.

PRACTITIONER TRAINING

A number of colleges and universities have been active in organizing and presenting short-term training for those working in the human resource development field. At Berea College, the Council of the Southern Mountains has been active in training professional personnel in the war on poverty. Virginia Polytechnic Institute has been training people to work in various antipoverty projects such as work training and adult education programs. Both the University of Tennessee (Bureau of Public Administration) and the University of Alabama (Division of Contract Grants and Development) received federal funds to train community action personnel in short courses. At the University of Florida, Dr. Wayne Antenen of the College of Education conducted a youth counseling program for the Job Corps. At six universities in five Southern states, personnel have been trained in guidance and counseling under the CAUSE program. To improve education in the counseling and guidance field, Dr. Edwin Kurth of the University of Florida's College of Education has been conducting a 42-week institute with emphasis on occupational guidance.

A number of colleges in the South are now offering courses, or holding seminars, on improved methods for teaching underprivileged children. Among these are Southern Methodist University, Texas Southern University, North Carolina A & T College and North Carolina College. With the exception of Southern Methodist University, all of these schools are predominantly Negro. It may be that white teachers could also profit from such courses, particularly since more and more schools are integrating. Both the University of Miami and the University of Florida, as well as the Human Relations Center of the University of Oklahoma and the College of Education of the University of Tennessee, have conducted seminars on school integration programs.

For a number of years the large Institute of Government at the University of North Carolina has been conducting an extensive training program. About 7,500 persons attend institute schools and conferences in Chapel Hill each year. Approximately 150 training courses will be held from June 1, 1965, to May 31, 1966. Some of these courses and conferences can be directed toward the needs of workers in human resource development.

To upgrade U. S. Department of Agriculture professional employees in the field, the Kellogg Foundation has provided a grant to the Agricultural Policy Institute of North Carolina State University to conduct a two-semester interdisciplinary seminar. The Institute will work with the departments of economics and sociology on this program. Virginia Polytechnic Institute has conducted a number of seminars to upgrade this same type agricultural personnel.

These examples illustrate the capacity, as well as the need, for coordination of useful university training efforts. Many newer programs have been too hastily organized to be completely effective. Some regional planning and careful development, combined with effective communication between agencies and universities, would greatly improve these programs.

VOCATIONAL TRAINING

A number of universities and colleges in the South have provided job training under MDTA projects or through offering courses on a planned or unplanned basis that could lead directly to jobs at the sub-professional level. Under MDTA, Tuskegee Institute has given basic education to fourth grade level rural residents and trained them in meat cutting, carpentry, bricklaying and farm mechanics. Arkansas A & M College, conducts an MDTA project in farm machinery operations. At North Carolina A & T College, the industrial arts department operated a \$184,000 MDTA Project for 210 persons in eight occupations: auto body repair, auto mechanics, bricklaying, carpentry, cooking, custodial care, nurse's aides and waitresses. The University of Oklahoma recently completed an eight-week program for 18 students in highway surveying and drafting. The instructor was a professor from the civil engineering school. He was helped by two graduate assistants. Alabama A & M College had one MDTA program in the secretarial science field.

At the Norfolk Division of Virginia State College, 100 hard-core unemployed were given a year of training in the fields of electronics, masonry, sheet metal, auto mechanics and maintenance technology. Instruction also was given in language arts, number skills, occupational information and human relations. Prairie View A & M College, Texas, has trained 48 clerk typists. A broader program to train 500 poor rural people is being formulated and will be submitted. At Texas Southern University, three MDTA programs have been funded: shoe repair, auto mechanics and stenography. Courses in air conditioning may be added. Tennessee A & I University has three regular MDTA programs for 120 students in electronics, dairy farming and farm mechanics. The College also operated an experimental and demonstration training program for 150 adult rural residents. Training was given in park maintenance, livestock work and meat processing. At North Carolina State University, a program was developed to train over 100 high school dropouts at three centers in bricklaying, upholstery, welding, carpentry, auto mechanics and nurses aides.

Most of the colleges sponsoring MDTA programs in the South are predominantly Negro. If these Negro colleges can support and train disadvantaged people under the MDTA program, it may be possible for white colleges to do likewise. In Tennessee, Austin Peay State College, which is predominantly a white school, is operating an experimental and demonstration project for 260 undereducated rural residents.

Even among Negro colleges, only a relatively small number are involved with MDTA projects. A worthwhile project would be to determine how more colleges and universities could and should help in MDTA programs. The above examples refer only to four-year colleges. A number of junior colleges and technical schools also have offered MDTA training.

Several colleges have inaugurated vocational programs of a unique character. At the Extension Division of the University of Texas, a Distributive Education Division develops structural materials, organizes conferences and course work, trains management personnel to train their own staffs, and has a research group concerned with retailing. Texas A & M University has heavy equipment training facilities. MDTA administrators in New York have requested that a handful of their trainees be taught at Texas A & M University, because the cost of training in Texas, despite the distance, is much lower than the cost of developing a program in New York. At the University of Maryland, a newly formed Institute of Applied Agriculture has inaugurated a two-year program to train technicians in agriculture and related fields. A grant from the U. S. Department of Health, Education and Welfare enabled the Institute of Government at the University of North Carolina to establish a training center for delinquent youth.

Sub-professional job training is possible in departments of home economics in food preparation, textile and apparel occupations and nursery school aides. Art departments might provide training in commercial art or fabrication of jewelry, weaving and other art handicrafts. Potentially, job training for aids in agricultural engineering, horticulture, forestry and food processing could be conducted in schools of agriculture.

Of 60 larger Southern colleges studied, 40 offer courses in secretarial science which may be the largest sub-professional training effort. Other possibilities for training exist in many other occupations from nurse's aides to library aides, none of which has been investigated in detail. The need for this type of training is evident, and pending development of more two-year colleges, the pressure for increased activity in this area by our colleges will grow. Possibly, a large part of this effort can be shifted to junior colleges and technical institutes, but some responsibilities will remain with our higher level institutions. Not all universities and colleges agree that job training is an activity in which they should be involved. Caution should be exercised in regard to the diversion of university resources away from their prime mission of research and professional training.

Industrial Resources

Most workers have been trained for the jobs they hold by the company or organization for which they work. Industry has developed a great capacity for, and has had years of experience in, manpower training for its own purposes. There is evidence that increased use might be made of industrial training

capacity. Untapped resources also exist in private industry for information on job vacancies and training needs, research in training methods, vocational curriculum development, and the preparation of vocational and technical teachers. A closer relationship needs to be developed between vocational and technical education institutions and industrial job training activities in order that all available resources are effectively applied to the total manpower development problems of the region.

Persons in more than 35 industries were contacted in our survey (Appendix XIV). Union Carbide operations in Oak Ridge were covered in greater depth as a convenient sample. Union Carbide also has many plants in other areas of the Southeast. All members of the staff made industry contacts in order to better relate findings at universities and state agencies. The selection of industries visited was based on a desire to spot check a variety of manufacturing, transportation and utility groups. Technological change and the need for highly trained persons are characteristic of these industries. The employment office of Union Carbide in Oak Ridge was helpful in making available information developed in a recent job placement effort for a large number of displaced employees which uncovered many companies with urgent manpower needs. Our survey illustrates a willingness on the part of industry to share experiences and information about their training activities and to explore possible cooperative programs.

JOB TRAINING

Industrial training was found to be extensive at all job levels. The productivity of all employees is being constantly increased by improved equipment and processes, in-the-job training on a large scale, and computer-generated information systems in all categories of industry. The degree of this manpower and technical change is reflected in the higher average wage rates and increased production with fewer workers, so obvious in many companies. The word training embraces many activities and programs in industry such as apprenticeship, supervisory conferences, safety, management development, equipment maintenance instruction and technical seminars. Top executives at Union Carbide expressed the view that the majority of employees in industry are working at below their maximum potential. They are trying to determine whether the key to more effective utilization of manpower may be found by making changes in the methods of managing and training.

Educational agencies, such as high schools and technical institutes, are depended on for a maximum of formal classroom instruction, with the company preferring to provide in-the-job training to suit particular job needs. This was found to be generally true even for apprenticeship programs in the companies contacted. Industry has found that the most effective method of job training is a combination of education and experience and is increasingly paralleling education and in-the-job training.

The weaknesses of many high school graduates in mathematics, communication skills and economics were mentioned frequently by survey contacts. The need to improve high school education and motivate the maturing youth with some work experience to prevent dropouts is a challenging problem. Industry has a vested interest in the preparation of high school students since they represent a major source of applicants for entry level jobs. Industry is also vitally concerned with upgrading and retraining to prevent obsolescence and meet new technical demands. The understanding of the total work training process in industry is important to the development of improved manpower development.

Training in industry is characterized by three methods:

1. Informational, - Meetings, reading journals and reports, and watching movies and exhibits;
2. Formal - Classroom and laboratory teaching with student participation; and
3. In-the-Job - Experience gained primarily in productive work.

Informational training has been found to be the most effective method of updating used by technical personnel, mainly by reading trade magazines. Technicians can develop themselves through this technique and progress "up the ladder," despite the lack of formal schooling. A related problem is that little encouragement is given the craftsmen to read on the job, or even at home. An untapped area of opportunity for industry-government cooperation is the provision of reading material and visual aids to help reduce obsolescence in skilled trades, and re-educate operators and clerical persons for the new jobs.

Formal class work on company time has been a last resort in industry and reserved for short courses because of the expense and the desire to use conventional educational institutions. Most companies encourage evening and correspondence education by paying at least half of the cost of successfully completed courses, even for apprenticeship classroom courses. The lack of convenient schools, especially technical and vocational, and the unavailability of needed courses, have resulted in the greater use of formal classes in industry.

In-the-job training represents a majority of industrial companies' efforts, and its importance cannot be overemphasized. Most persons are hired and placed in their job to do effective work immediately. Thus, training becomes a major function of foremen and supervisors. All companies contacted use the above three methods with a multitude of techniques.

In the contacted industries, training is a function invariably connected with industrial relations and personnel departments. Most large plants have a person identified as a training director or coordinator working with supervisors who are also responsible for safety, hiring, labor relations and salary administration. In small plants, the personnel manager handles all of these functions, and training is a side interest. The responsibility for specific in-the-job training activities belongs to the line supervision. Unfortunately, a comment heard too often was that the plant or company had no formal training policy. An important conclusion of a Labor Department survey of American industry in 1962 was that "a majority of industrial firms apparently has adopted no formalized program for training its workers ..." Our survey of principally manufacturing industries bears out this conclusion. However, this does not minimize the training that actually takes place.

Industry management is most concerned about the economical justification of a proposed training activity; training objectives to suit particular needs were frequently mentioned. A training objective specifies what an employee should be able to do upon completion of a training program. When derived from actual job requirements, it is an instructional goal that, if achieved, prepares employees to perform effectively on a job. Clearly stated objectives provide a primary basis for course-content and program of instruction. They also provide learning goals and a basis for evaluation of achievements.

Many Southern industries have established organizational units with training personnel, training equipment, and classrooms or shop areas, devoted to their training efforts. In addition, they have a unique element for which there is no realistic substitute - that of experience in the actual work situation. Industry has a training combination not duplicated elsewhere that needs especially to be applied to a perennial problem - the young worker who cannot get a job experience, but who cannot get experience without a job.

It was obvious from our discussions that industrial training programs are geared to high school graduates, college dropouts, or graduates from vocational or technical schools. They are becoming less experienced in training workers who have less than this level of achievement. However, special programs for the hard core, which combine basic education and industrial training, should be very effective.

There seems to be a range of possibilities for utilizing the training resources of industry, running from improved use of the labor pool through operations of regular and demonstration MDTA training programs. A common practice with the larger industrial plants is to maintain a pool of unassigned workers who are used as needed to fill in on various jobs. This pool is usually expanded in the summer months to take care of vacation absences. With planning the direction, more careful recruitment, and wider exposure to work experience, the labor pool workers could be prepared for a number of job opportunities, either in the plants utilizing these practices or in smaller plants in the region. Also, it would seem appropriate to make a tie-in with the work training programs under the Economic Opportunity Act such as the Job Corps and Neighborhood Youth Corps, and provide industrial work experience of real benefit to graduate trainees. An additional use for the labor pool could involve the summer work program inaugurated by President Johnson this past summer designed to provide work experience for youth.

More ambitious projects would be those involving the actual conduct of regular MDTA training courses for selected groups of trainees. They would receive training in conjunction with the regular training activities of the company. Also, special courses designed to use the specialized facilities of selected companies might be the most effective manner to provide certain levels of training.

Many of the industrial personnel with whom such activities were discussed seemed willing to pursue these matters further and agreed that they had some facilities and capacities that could not be duplicated elsewhere. Many companies have had favorable experiences with cooperative training programs, mostly operated for college students. With proper stimulation, these activities could probably be increased and extended to vocational and technical schools. As indicated in our program recommendations, we have progressed at some length with Union Carbide in the development of a demonstration training program that would actually try, on a pilot basis, several job training arrangements. Also, it would seem that active participation in job training would lead to more complete information regarding job vacancies and job training needs from industry's standpoint.

INFORMATION ON JOB VACANCIES AND JOB TRAINING NEEDS

The need for information about job vacancies and job training requirements poses a critical training problem. The information does not seem to be available, especially on a regional or local basis. However, if an effective job of training is to be done, it is essential that this information become available. It was quite obvious from our discussions with industrial representatives that such information is available to them, and is kept current on a monthly basis with close review by most industries every six months. Also, Union Carbide, in connection with its informal placement service, uncovered a great deal of information on job needs and vacancies from hundreds of industries throughout the South. In this way they were able to place many employees who had to be released because of a reduction in the amount of work at the plant. It is interesting to note that this service was performed for employees by the company rather than by the local office of Employment Security, although that office cooperated in the effort.

It was obvious from our contacts with industry, as well as with public employment services, that there is definitely a need for closer cooperation and communications. Part of the problem results from the employment services lack of staff to work on improved relationships with employees. There exists a need to break down the suspicion of private industry regarding government activities in the manpower field. If industry can be made to understand the problem and why it is important, increased cooperation on job vacancy information and training needs could be obtained. To do this job is going to require a program effort properly staffed and directed with specialized personnel to make the contacts, build the understanding and secure the necessary information.

The reliance of private industry on the established educational system was noted earlier. To the extent that industry begins to participate more fully in the regional manpower training effort through job training and an exchange of information, it would be possible to encourage more active contact between industry and vocational and technical training efforts now under way as part of the Vocational Education Act of 1963.

VOCATIONAL TRAINING

If vocational training is expected to help large numbers of people without work, it is necessary that an improved relationship be established between vocational education and private industry. Discussions with both groups of officials revealed that there is little exchange of information on activities in the training field. An additional disturbing fact is that many industries make no use of vocational school graduates and many vocational educational officials have no idea what happens to the graduates of vocational schools. This is particularly true in regard to the one-year post-high school vocational training effort. For the two year technical institute, particularly those turning out top quality students, this problem does not exist. The South is on the verge of spending millions of dollars to develop a large number of one-year vocational schools, and to strengthen the vocational training programs of regular high schools. If there is not close and continuous collaboration between the vocational education officials and private business and industrial organizations this effort can result in a huge waste of money and many frustrated graduates.

Industrial representatives lack adequate information about the extent of manpower problems such as the large number of youths now entering the job market and the training problems associated with the lack of education and experience. They have been able to recruit top quality high school graduates by selec-

ting anywhere from 1 in 10 to 1 in 50 that have applied and are qualified. They tend to consider the rest lazy if they do not get jobs elsewhere. There appeared to be a preference for the bright academic high school graduate as opposed to those with vocational training. Large industries want to train their own employees, recognizing that most vocational training facilities in the South are not properly equipped and do not have adequately trained instructors.

It would seem in this situation that the labor pool practice of the larger industries could be used to give more work experience and screening to graduates of vocational schools. It would be particularly effective for industries to use as temporary summer employees instructors from vocational schools. If these instructors are exposed to a wide variety of industrial activities, they would better understand the training needs of private industry. Local teachers are often given summer jobs in industry. This practice needs to be increased and programmed in order to have a wider reaching effect. It is anticipated that special provisions will be developed in the proposed training project for Union Carbide at Oak Ridge in regard to experimental training of vocational teachers using modern industrial facilities as a training laboratory.

RESEARCH

There is considerable industrial research activity related to training. Much of this is recorded by the cooperative program between the University of Tennessee and the American Society of Training Directors. The Society provides a grant to the University of Tennessee for abstracting the most valuable articles in the industrial training field and publishing these in a bulletin that has limited circulation. The Human Resources Research Office of the George Washington University does considerable training research for the Department of the Army which has civilian applications.

Many Southern industries, especially those in the space and atomic energy fields, are constantly being involved in new occupations and have considerable interest in research that would help them identify the tasks to be performed and the knowledge to be acquired in order to develop training programs to prepare personnel needed for these new occupations. Considerable additional research is needed, particularly in the areas of increased training efficiency, the use of modern visual aids and teaching machines, in order to determine which techniques are the most effective and efficient for training. There is also interest in job fractionalization studies for work performed at the technician and sub-professional levels.

There can be more cooperation between industry and university faculty and graduate students in training research. Industries have indicated a willingness to use university research personnel in the manpower field during the summer months on a research participation basis. There are a number of instances where the use of graduate students for research has proved to be beneficial to both universities and industrial establishments. These efforts could be linked with the program possibilities mentioned earlier for state manpower agencies and universities. These programs would contribute to development of a more comprehensive and effective research effort for Southern manpower training.

References

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2. Marshall Colberg, *Human Capital in Southern Development*, Chapel Hill; University of North Carolina Press, 1965.
3. Ray Marshall, *The Negro in Organized Labor*, New York; John Wiley, 1965. He currently has a grant from OMAT to study the participation of Negro workers in apprenticeship programs.

4. Edgar Thompson, *Race Relations and the Race Problem*; Durham; Duke University, 1948. The late E. Franklin Frazier of Howard University published a number of books on the Negro.
5. Thomas Ford, ed., *The Southern Appalachian Region*, Lexington; University of Kentucky Press, 1962.
6. Recently, a Center of Southern Studies has been created at Duke University. One of the first things they wish to do is to update Howard Odom's book on *Southern Regions of the United States* (1936).
7. This study will be directed by Robert S. Rankin, Professor of Political Science at Duke University.
8. See Norman Chansky, *Untapped Good: The Rehabilitation of High School Dropouts*, Raleigh; North Carolina State University, 2 vols., 1965.
9. The University of Maryland project is under the direction of Dr. Richard H. Byrne; Dr. John Pierce-Jones heads the program at the University of Texas.
10. This research was conducted by Dr. Harry Parker. The findings have been published in a number of journals including *The Journal of Counseling Psychology*, Fall, 1965.
11. Donald Maley and Alan Keeny, "Montgomery County, Maryland, Research and Experimentation in Industrial Arts," *The Bulletin*, February 1962.
12. Donald Maley, "Research and Experimentation in the Junior High School," *Industrial Arts Teacher*, March-April 1959.
13. This research is being conducted by Professor Durwin Hanson, head of the department.
14. This was a NASA financed study under the direction of Dr. B. A. Turner, Dean of Industries.
15. Dr. John Fulmer has recently completed a paper entitled, "Kentucky Occupation Trends from 1950 to 1960 with Projections to 1975." With the aid of Professor William Wesson of the economics department, the University of South Carolina, is completing a study concerned with labor availability and skill requirements for South Carolina for the next ten years. At the University of Tennessee, studies have been done in the past on the migration of labor and labor force analysis, but at present there are no staff members working in this area. The bureau at the University of Arkansas is also carrying on county income and population studies.

Appendices

Appendix I

UNIVERSITIES AND COLLEGES VISITED

Alabama A & M College
Auburn University*
Tuskegee Institute*
University of Alabama*

Arkansas A & M College
University of Arkansas*

Catholic University*
Howard University

Florida A & M University
Florida Atlantic University
Florida State University*
University of Florida*
University of Miami*
University of South Florida

Atlanta University
Emory University
Georgia Institute of Technology*
Georgia State College
University of Georgia*

Berea College
Kentucky State College
University of Kentucky*
University of Louisville*

Louisiana State University*
Tulane University*

University of Maryland*

Mississippi State University*
University of Mississippi*

Duke University*
North Carolina A & T College
North Carolina College
North Carolina State University*
University of North Carolina*

Oklahoma State University
University of Oklahoma*

Clemson University*
University of South Carolina*

Fisk University*
George Peabody College for Teachers
Memphis State University
Tennessee A & I University
Tennessee Technological University
University of Tennessee*
Vanderbilt University*

North Texas State University*
Prairie View A & M College
Rice University*
Southern Methodist University*
Texas A & M University*
Texas Christian University*
Texas Southern University
Texas Woman's University*
University of Houston
University of Texas*

University of Virginia*
Virginia Polytechnic Institute*
Virginia State College

West Virginia University*

* Member Institutions - Oak Ridge Institute of Nuclear Studies

Appendix II

AGENCIES VISITED IN FIELD SURVEY OF FIFTEEN STATES

AGENCIES VISITED IN EACH STATE

1. State Departments of Education – included officials concerned with MDTA training, vocational education and adult education programs.
2. State AFL-CIO Council Officials
3. State Departments of Employment Security – visited director, those responsible for MDTA training programs, and head of research division.
4. State Offices of the Economic Opportunity Program
5. State Planning or Industrial Development Commissions
6. State Public Welfare Agencies
7. State Office of the Bureau of Apprenticeship and Training
8. Agricultural Agencies. Contacts were made either with farmers' Home Administration of the State Agricultural Extension Service.
9. Councils of Human Relations

REPRESENTATIVE VISITS TO AGENCIES IN THE STATES

1. Appalachian Program. Visits were made to state officials in the majority of the states in the region eligible for this program and the Office of the Appalachian Commission in Washington, D.C.
2. Area Redevelopment Administration. State and federal ARA officials were contacted in two-thirds of the states.
3. Manpower Advisory Committee members were visited in seven states.

MISCELLANEOUS AGENCY VISITS

1. Bureau of Indian Affairs
2. Hogg Foundation
3. Federal Reserve Bank of Atlanta
4. Bureau of the Census, Washington, D.C.
5. Vocational-Technical Education Division of the Office of Education, Washington
6. North Carolina Science and Technology Research Center
7. Research Triangle Institute
8. Human Resources Research Office, Alexandria, Virginia
9. The Council of the Southern Mountains
10. The Southern Regional Council

Appendix III

EDUCATIONAL ACHIEVEMENT OF POPULATION OVER 25 YEARS

	Population Over 25 Years	%	Less Than 5 Years Education	%	5 to 8 Years Education	%	9 to 12 Years Education	%
UNITED STATES	99,438,083	100	8,352,799	8.4	13,703,610	13.8	36,512,622	36.7
REGION	28,299,027	28.5	4,002,042	14.1	5,514,249	19.5	8,851,401	31.3
Alabama	1,669,871		272,189	16.3	371,229	22.2	520,482	31.2
Arkansas	964,032		148,461	15.4	182,766	19.0	354,200	36.7
Florida	2,845,445		261,781	9.2	388,286	13.6	983,218	34.6
Georgia	2,014,845		354,613	17.6	456,827	22.7	558,655	27.7
Kentucky	1,609,957		222,174	13.8	312,610	19.4	630,825	39.2
Louisiana	1,639,215		349,153	21.3	338,411	20.6	422,185	25.8
Maryland	1,692,562		130,327	7.7	330,184	19.5	555,026	32.8
Mississippi	1,064,976		200,216	18.8	202,822	19.0	344,575	32.4
North Carolina	2,307,171		380,683	16.5	574,903	24.9	606,369	26.3
Oklahoma	1,299,842		111,786	8.6	192,383	14.8	469,237	36.1
South Carolina	1,135,907		230,589	20.3	262,541	23.1	297,461	26.2
Tennessee	1,911,755		281,028	14.7	385,374	20.6	664,180	34.7
Texas	5,030,559		674,095	13.4	840,354	16.7	1,529,039	30.4
Virginia	2,083,159		274,977	13.2	480,813	23.1	537,852	25.8
West Virginia	999,731		109,970	10.9	194,746	19.5	389,097	38.9

SOURCE: U. S. Bureau of Census, 1960

Appendix IV

NUMBER AND PERCENT DROPOUTS 1958-62 HIGH SCHOOL CLASS

	Number	Percent
UNITED STATES	731,695	28
REGION	335,669	39
Alabama	21,405	41
Arkansas	11,248	37
Florida	23,157	35
Georgia	27,444	43
Kentucky	17,765	43
Louisiana	19,512	41
Maryland	13,752	34
Mississippi	14,380	39
North Carolina	33,274	41
Oklahoma	12,295	31
South Carolina	15,949	40
Tennessee	23,463	41
Texas	51,354	37
Virginia	20,611	37
West Virginia	30,060	40

SOURCE: U. S. Bureau of Census, 1960

Appendix V

INCOME LEVELS FOR FAMILIES AND UNRELATED INDIVIDUALS

	Median Family Income	Total Number of Families	% of all Families	Number of Families with Income less than \$3,000	% of all Area Families	Total Number of Unrelated Persons	% of Unrelated Persons	Number of Unrelated Persons with Income less than \$2,000	% of all Unrelated Persons in Area
UNITED STATES	\$5,660	45,128,393	100	9,657,476	21.4	13,176,614	100	7,697,435	58.4
REGION	4,465	13,226,393	29.3	4,422,755	33.5	3,430,857	26.0	2,357,636	68.7
Alabama	3,937	790,710		308,871	38.7	157,952		115,463	73.2
Arkansas	3,184	452,471		215,627	47.6	104,447		82,827	79.3
Florida	4,722	1,296,760		368,084	28.4	426,911		307,376	72.0
Georgia	4,208	949,408		338,120	35.7	230,180		156,062	67.8
Kentucky	4,051	752,671		286,237	38.1	179,910		127,017	70.6
Louisiana	4,272	771,252		274,588	35.7	191,458		136,893	71.6
Maryland	6,309	763,412		116,301	15.3	207,622		117,722	56.8
Mississippi	2,884	500,921		258,549	51.6	121,475		96,573	79.5
North Carolina	3,956	1,091,656		405,579	37.2	258,071		180,650	70.0
Oklahoma	4,620	612,790		189,941	31.0	180,297		126,388	70.1
South Carolina	3,821	541,358		214,030	39.6	140,035		101,245	72.3
Tennessee	3,949	893,622		342,210	38.3	195,139		139,915	71.8
Texas	4,884	2,392,564		687,965	28.8	646,562		420,265	65.0
Virginia	4,964	954,720		266,129	27.9	296,000		181,744	61.4
West Virginia	4,572	462,078		150,524	32.6	94,798		67,496	71.2

SOURCE: U. S. Bureau of Census, 1960

Appendix VI

EMPLOYMENT BY INDUSTRY THE UNITED STATES AND THE SOUTH, 1960

	United States		South	
	Number	Percent	Number	Percent
Total Employed	64,639,256	100	18,615,539	100
Agriculture, forestry, and fisheries	4,349,884	6.73	1,785,949	9.59
Mining	654,006	1.01	339,234	1.82
Construction	3,815,942	5.90	1,300,173	6.98
Manufacturing	17,513,086	27.09	3,978,983	21.37
Transportation, communication, and other public utilities	4,458,147	6.90	1,235,808	6.64
Wholesale and retail trade	11,792,635	18.24	3,449,041	18.53
Finance, insurance, and real estate	2,694,630	4.17	669,100	3.59
Services, except private household, educational and welfare	7,629,141	11.80	1,992,988	10.71
Private household services	1,916,964	2.97	905,007	4.86
Educational Services: government and private	3,393,933	5.26	984,865	5.29
Welfare and religious services	609,909	.94	228,928	1.23
Public administration	3,202,894	4.96	1,057,111	5.68
Industry not reported	2,608,085	4.03	688,352	3.70

SOUTH: United States Census of Population, 1960, U. S. Summary

Appendix VII

LABOR FORCE DISTRIBUTION BY OCCUPATION AND DISTRESSED AREAS

	Labor Force	Percent in Agriculture	Percent White Collar Occupations	Durable Goods Manufacturing	Non-Durable Goods Manufacturing	Number of Areas of Substantial and/or Persistent Unemployment
UNITED STATES	64,639,252	6.5	41.1	15.2%	11.9%	541
REGION	19,821,979	9.6	36.4	8.8	12.5	235
Alabama	1,152,736	9.6	33.7	13.7	12.8	4
Arkansas	609,688	17.4	32.6	10.6	9.5	20
Florida	1,886,833	6.4	42.5	6.2	6.9	5
Georgia	1,515,829	8.7	35.2	8.8	17.5	23
Kentucky	1,034,489	14.2	34.1	10.6	10.6	33
Louisiana	1,092,385	7.3	37.8	5.6	10.0	16
Maryland	1,242,217	3.2	45.9	13.6	10.9	5
Mississippi	742,604	20.9	29.2	8.9	10.2	10
North Carolina	1,754,362	12.8	30.5	9.2	22.5	13
Oklahoma	854,095	9.4	42.4	6.5	6.7	34
South Carolina	896,246	11.7	29.6	6.8	25.3	1
Tennessee	1,313,945	10.7	34.8	9.8	16.2	18
Texas	3,635,871	8.7	41.1	7.5	8.7	14
Virginia	1,532,599	7.4	40.4	9.2	13.1	6
West Virginia	558,080	4.4	36.4	13.4	9.9	33

SOURCE: U. S. Bureau of Census, 1960

Appendix VIII

FAMILIES WITH LESS THAN \$3000 INCOME BY GEOGRAPHIC LOCATION

	Number of Families	Urban				Rural				All Families - Urban, Rural Farm, and Rural Non-Farm within SMSAs			
		SMSAs		Other Urban		Farm		Non-Farm		Number		Percent	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
REGION	4,422,755	1,151,241	26.0	803,934	18.2	827,794	18.7	1,639,786	37.1	1,401,372	31.7		
Alabama	308,871	76,441	24.7	51,933	16.8	60,021	19.4	120,476	39.0	96,537	31.2		
Arkansas	215,627	18,681	8.7	48,693	22.6	53,275	24.7	94,978	44.0	26,603	10.1		
Florida	368,084	190,322	51.7	65,723	17.9	12,151	33.0	99,888	27.1	218,753	59.4		
Georgia	338,120	87,796	26.0	63,183	18.7	56,505	16.7	130,636	38.6	114,669	33.9		
Kentucky	286,237	41,784	14.6	39,456	13.8	81,683	28.5	123,314	43.1	48,281	16.9		
Louisiana	274,588	87,553	31.9	53,698	19.6	32,095	11.7	101,242	36.9	101,051	36.7		
Maryland	116,301	59,832	51.4	11,115	9.6	9,254	8.0	36,100	31.0	61,300	52.8		
Mississippi	258,549	9,481	3.7	61,953	24.0	83,759	32.4	103,356	40.0	13,570	5.2		
North Carolina	405,579	43,408	10.7	78,209	19.3	110,895	27.3	173,067	42.7	65,041	16.0		
Oklahoma	189,941	42,597	22.4	48,362	25.5	32,271	17.0	66,711	35.1	51,829	27.3		
South Carolina	214,030	32,039	15.0	40,713	19.0	45,906	21.4	95,372	44.6	46,671	21.8		
Tennessee	342,210	82,757	24.2	49,344	14.4	90,428	26.4	119,681	35.0	109,626	32.1		
Texas	687,965	284,690	41.4	141,840	20.6	93,060	13.5	168,375	24.5	329,122	48.5		
Virginia	266,129	74,730	28.1	29,205	11.0	50,723	19.1	111,471	41.9	78,568	29.5		
West Virginia	150,524	19,130	12.7	20,507	13.6	15,768	10.5	95,119	63.2	39,751	26.3		

SOURCE: U. S. Bureau of Census, 1960

Appendix IX
COMMERCIAL FARMS

	Commercial Farms	Class VI Commercial Farms	Class VI Commercial Farms as a Per Cent Of Commercial Farms
UNITED STATES	2,416,017	348,954	14
REGION	908,080	244,498	27
Alabama	57,850	24,274	42
Arkansas	52,462	13,484	26
Florida	23,322	3,259	14
Georgia	61,955	14,067	23
Kentucky	86,851	27,157	31
Louisiana	34,714	13,010	37
Maryland	15,979	1,383	9
Mississippi	73,310	33,153	45
North Carolina	120,078	26,904	22
Oklahoma	56,942	8,219	14
South Carolina	42,333	13,591	32
Tennessee	82,639	29,598	36
Texas	137,513	16,823	12
Virginia	49,527	14,630	30
West Virginia	12,605	4,946	39

SOURCE: U. S. Census of Agriculture, 1959.

Appendix X

COMPARISON OF WHITE AND NON-WHITE INCOME AND EDUCATION

	Total Population	Percent Non-White	Number Non-White	Median Income			Educational Attainment		
				White	Non-White	Non-White % of White	White	Non-White	Non-White % of White
REGION	53,762,829	20.5	11,023,135	\$5,009	\$2,322	46.3	10.3	7.9	76
Alabama	3,266,740	30.1	983,289	4,764	2,009	42.2	10.2	6.5	69.9
Arkansas	1,786,272	21.9	391,194	3,678	1,636	44.5	9.5	6.5	78.1
Florida	4,951,560	17.9	886,329	5,147	2,798	54.5	11.6	7.0	82.1
Georgia	3,943,116	28.6	1,127,731	5,027	2,188	43.5	10.3	6.1	71.4
Kentucky	3,038,156	7.2	218,747	4,193	2,570	61.3	8.7	8.2	92.8
Louisiana	3,257,022	32.1	1,045,504	5,288	2,238	42.3	10.5	6.0	67.9
Maryland	3,100,689	17.0	527,117	6,703	3,926	58.6	11.0	8.1	83.0
Mississippi	2,178,141	42.3	921,354	4,209	1,444	34.3	11.0	6.0	57.7
North Carolina	4,556,155	25.4	1,157,263	4,588	1,992	43.4	9.8	7.0	74.6
Oklahoma	2,328,248	9.5	221,187	4,824	2,378	49.3	10.7	8.6	90.5
South Carolina	2,382,594	34.9	831,525	4,893	1,699	34.7	10.3	5.9	65.1
Tennessee	3,567,089	16.5	588,570	4,333	2,292	52.9	9.0	7.5	83.5
Texas	9,579,677	12.6	1,207,039	5,239	2,591	49.5	10.8	8.1	87.4
Virginia	3,966,949	20.8	825,125	5,522	2,780	50.1	10.8	7.2	79.2
West Virginia	1,860,421	4.9	91,161	4,650	2,874	61.8	8.8	8.4	95.1

SOURCE: U. S. Bureau of Census, 1960

Appendix XI

NUMERICAL AND PERCENTAGE DISTRIBUTION OF FAMILIES WITH INCOMES LESS THAN \$3000 - 1960

	<u>Total*</u>		<u>As Percent of all Families</u>	
	United States	South†	United States	South
Total	9,650	4,473	21.4%	33.0%
White	7,616	3,014	18.6	26.9
Non-White	2,034	1,459	47.6	62.8
Urban - Total	5,216	1,993	16.3	24.6
White	3,942	1,229	13.7	18.4
Non-White	1,274	764	39.5	53.1
Rural Non-Farm - Total	2,851	1,643	28.9	41.1
White	2,326	1,172	25.5	34.7
Non-White	525	471	70.3	75.2
Rural Farm - Total	1,583	837	47.1	58.6
White	1,348	613	43.7	52.4
Non-White	235	224	83.9	86.4

* In thousands

† Includes Delaware and District of Columbia

SOURCE: U. S. Department of Health, Education and Welfare, Welfare Research Report No. 1.

Appendix XII

OCCUPATIONS IN THE UNITED STATES
AND THE SOUTH, BY RACE, 1960
(IN PERCENT)

	United States		South	
	White	Non-White	White	Non-White
Professional	11.19	5.31	11.09	4.68
Farmers and Farm Managers	3.88	2.91	5.22	5.10
Managers, except farm	8.37	1.83	10.15	1.29
Clerical	14.40	6.39	14.27	2.52
Sales	7.18	1.60	8.33	1.04
Craftsmen	13.52	6.41	14.43	5.36
Operatives	18.41	19.25	18.65	17.32
Private Household	2.67	14.04	1.11	17.96
Service, except private household	8.42	16.48	6.33	15.39
Farm Laborers	2.24	5.45	2.36	9.38
Laborers, except farm	4.81	12.09	3.75	14.55
Occupation not reported	4.93	8.24	4.31	5.42

SOURCE: U. S. Bureau of Census, 1960

Appendix XIII

LABOR CURRICULUM IN THIRTY-SIX MAJOR SOUTHERN UNIVERSITIES

Schools	Survey ¹	Labor Markets	Collective Bargaining	Labor Legislation	Trade Unionism ²	Current Problems ³	Social Insurance	Total
1	x		x	x				3
2	x		x	x	x			4
3	x				xx			3
4	x		x	x				3
5	x		x					2
6	x		x	x	x			4
7	x							1
8	x	x						2
9	x			x				2
10	x							1
11	x		x	x	x			4
12			x	x				2
13	x		x	x		xx		5
14	x		x	x				3
15			xx					2
16	x	x						2
17	x		x	x	xx			5
18		x ^a	x ^a					2
19								0
20	x	x	x	x	x			5
21	x		x		x		x	4
22	x		xx	x				4
23	x							1
24	x	x						2
25		x ^a	x ^a					2
26	x							1
27	x		x			x		3
28	x							1
29		x ^a	x ^a					2
30	x							1
31	x		x	x			x	4
32	x	x		x				3
33		x ^a	x ^a	x		x		4
34								0
35	x							1
36	x		x					2
Totals	28	9	23	15	9	4	2	90

¹ The introductory course is a survey of collective bargaining, trade unionism, labor markets, and other aspects of labor, often including protective labor legislation; the course is usually designated as labor problems or labor economics.

² Also includes courses in the labor movement, contemporary unionism, internal structure of unions, and comparative-labor movements.

³ Also includes dispute settlement, and government and labor.

^a Schools offering a two-course sequence.

SOURCE: 1965 Study by Dr. Mack Moore

Appendix XIV

INDUSTRIAL CONTACTS

Reynolds Metal Works, Lister Hill, Alabama
Brown Engineering Company (Alabama)
U. S. Steel Company, Fairfield Works (Alabama)
Marshall Space Flight Center, Huntsville, Alabama
TVA Chemical Operations (Alabama)

Lockheed Aircraft (Georgia)
Delta Airlines, Atlanta, Georgia

Spindletop Research Center, Lexington, Kentucky
IBM Corporation, Lexington Plant (Kentucky)
Mason Hanger, Lexington, Kentucky
ARMCO Steel Corporation, Ashland Works (Kentucky)

Humble Oil Refining Company, Baton Rouge, Louisiana

Fieldcrest Mills, Spray, North Carolina
Cone Mills Corporation, Greensboro, North Carolina

Union Carbide Carbon Products Division Plant, Greenville, South Carolina

Mead Corporation, Kingsport, Tennessee
American St. Gobain Corporation, Kingsport, Tennessee
Kingsport Press (Tennessee)
Tennessee Eastman Kodak, Kingsport
ALCOA, Alcoa, Tennessee
Union Carbide Nuclear Division, Oak Ridge, Tennessee
Combustion Engineering Company (Tennessee)
Bowaters Paper Company, Calhoun, Tennessee
TVA Office of Power, Chattanooga, Tennessee
Tennessee Valley Authority (Apprenticeship Training), Knoxville
Jeffrey Manufacturing Company, Morristown, Tennessee
Industrial Development Department, Morristown Chamber of Commerce (Tennessee)

Texas Power and Light Company

Dan River Mills, Inc., Danville, Virginia
U. S. Navy, Public Works Center, Norfolk, Virginia
Reynolds Metal (Home Office), Richmond, Virginia

Kaiser Aluminum, Riverton, West Virginia
Union Carbide Chemicals Company, Technical Center, Charleston, West Virginia

AMP, Inc., Harrisburg, Pennsylvania
Union Carbide Corporation, New York Headquarters

Appendix XV

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Southern Manpower Technical Assistance Program*